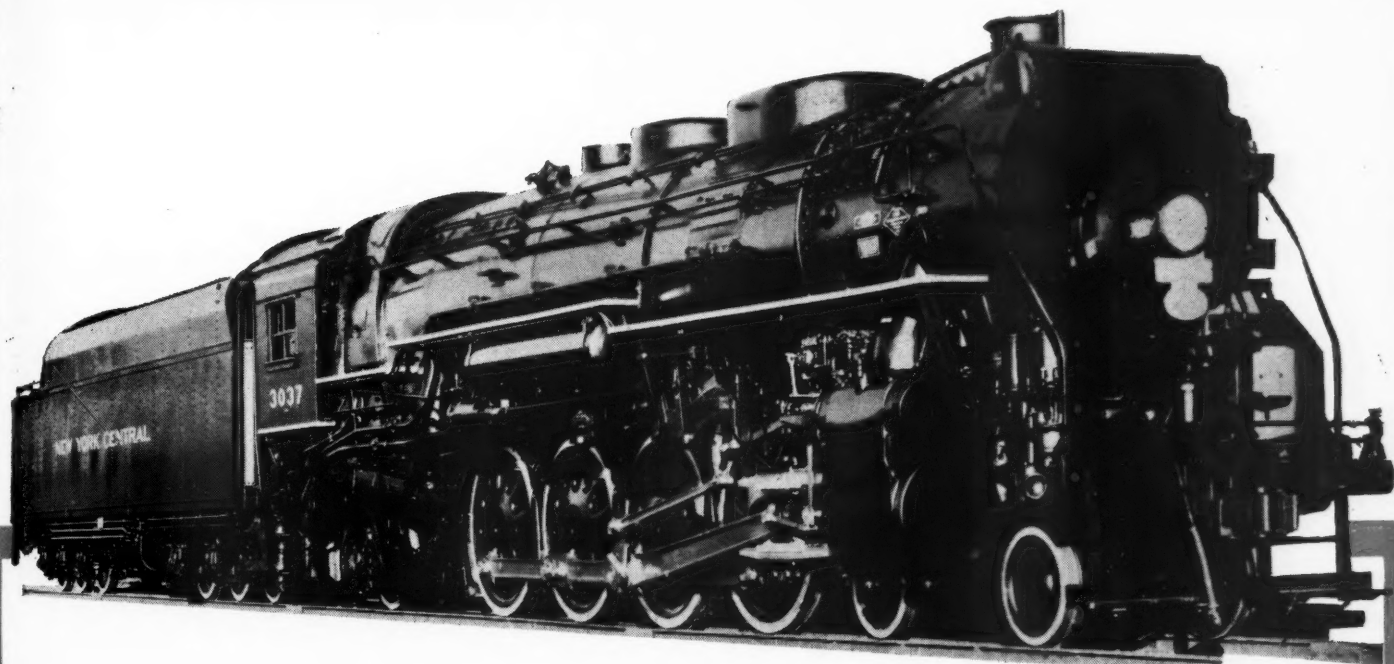


JANUARY 29, 1944

FEB 4 1944

# Railway Age

Founded in 1856



**A locomotive, too, is as young as its arteries...**

The saying that a man is as old—or as young—as his arteries applies with equal truth to locomotives. As one important step toward life-extension for vital rolling stock, the New York Central Railroad used Byers Wrought Iron in the piping in this new locomotive.

Even before the war, the general trend was toward an increasing use of wrought iron, for experience had proved that on a dollars and cents basis wrought iron costs *less* in the long run. Today, when the need for utilizing every piece of equipment to its utmost transcends every other consideration . . . the trend toward wrought iron not only continues, but has been accelerated.

The low cost life of wrought iron in locomotive piping goes right back to its unusual structure. Threaded through the matrix of high-purity iron are thousands of tiny, glass-like fibers of silica slag. Corrosive action is halted and deflected by these fibers, which also

serve to anchor the initial protective film that shields the underlying metal. When galvanizing or paint is used, the characteristic surface of wrought iron provides a better bond, and will take and carry a heavier coating.

Another big advantage is in wrought iron's resistance to fatigue failure. The material has a tough, fibrous structure, which might be compared to that of a stranded wire cable. Comparative experience indicates wrought iron will give much longer life in applications where sudden shock or constant vibration are encountered.

Our Engineering Service Department has records of a large number of installations, as wrought iron has been used on practically

## BYERS Wrought Iron

every piping service on a locomotive at one time or another. If you would like to check on the performance of wrought iron in any particular service, we can give you facts and figures—or, perhaps put you in touch with a user.

A. M. Byers Company. Established 1864. Offices in Pittsburgh, Boston, New York, Philadelphia, Washington, Chicago, St. Louis, Houston, Seattle, San Francisco.

### BYERS

GENUINE WROUGHT IRON

TUBULAR AND HOT ROLLED PRODUCTS

ELECTRIC FURNACE ALLOY STEELS · OPEN HEARTH ALLOY STEELS  
CARBON STEEL TUBULAR PRODUCTS

CORROSION COSTS YOU MORE THAN WROUGHT IRON

# Another Feature in PORTER DIESEL ELECTRICS



## SAFETY

## STEP-

*Speeds-up*

## SWITCHING!

Included in the many outstanding features of Porter Diesel-Electric Locomotives is the Porter Safety Step, designed to render yard work *safer, speedier and easier.*

Yardmen, switchmen and engineers all appreciate this extra safety and owners profit by the saving in

operating costs and faster switching. In addition to the Safety Step, Porter Diesels are designed with extra clearance under gear unit; large, free-sliding steel cab sash and windows of shatter-proof glass; readily accessible air compressors and other operating parts, and separate starting battery for each power unit. Complete specifications of any model on request.



ONLY PORTER BUILDS A COMPLETE LINE OF LOCOMOTIVES FOR INDUSTRY

### H. K. PORTER COMPANY, INC.

PITTSBURGH, PENNSYLVANIA  
NEW YORK, CHICAGO, PHILADELPHIA

Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price \$6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 116, No. 5.



# Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

Vol. 116

January 29, 1944

No. 5

## In This Issue

PUBLISHED EACH SATURDAY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION, 1309 NOBLE STREET, PHILADELPHIA 23, PA., WITH EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK 7, N. Y. AND 105 W. ADAMS STREET, CHICAGO 3, ILL.

WASHINGTON 4, D. C.: 1061 NATIONAL PRESS BUILDING, CLEVELAND 13: TERMINAL TOWER SEATTLE 1: 1033 HENRY BUILDING, SAN FRANCISCO 4: 300 MONTGOMERY STREET, ROOMS 805-806. LOS ANGELES 14: 530 WEST 6th STREET.

SAMUEL O. DUNN, CHAIRMAN, HENRY LEE, PRESIDENT, ROY V. WRIGHT, VICE-PRESIDENT AND SECRETARY, F. H. THOMPSON, E. T. HOWSON, F. G. KOCH, R. E. THAYER, H. A. MORRISON, J. G. LYNE, H. E. McCANDLESS, VICE-PRESIDENTS, J. T. DUMOTT, TREASURER.

SAMUEL O. DUNN, EDITOR, ROY V. WRIGHT, MANAGING EDITOR, ELMER T. HOWSON, WESTERN EDITOR, JAMES G. LYNE, ASST. TO EDITOR, C. B. PECK, ALFRED G. OEHLE, E. L. WOODWARD, J. H. DUNN, R. A. DOSTER, H. G. WILCOX, NEAL D. HOWARD, CHARLES LAYNG, GEORGE E. BOYD, WALTER J. TAFT, M. H. DICK, JOHN S. VREELAND, C. MILES BURPEE, ARTHUR J. MCGINNIS, J. L. STOVER, C. B. TAVENNER, H. E. MEASON, LIBRARIAN, EDITH C. STONE, EDITORIAL ASSISTANT, BETTY KETCHUM.

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PAPERS (A. B. P.) AND AUDIT BUREAU OF CIRCULATION (A. B. C.).

SUBSCRIPTIONS, INCLUDING 52 REGULAR WEEKLY ISSUES, AND SPECIAL DAILY EDITIONS PUBLISHED FROM TIME TO TIME IN NEW YORK OR IN PLACES OTHER THAN NEW YORK, PAYABLE IN ADVANCE AND POSTAGE FREE. UNITED STATES, U. S. POSSESSIONS AND CANADA: 1 YEAR \$6.00; 2 YEARS, \$10.00; FOREIGN COUNTRIES, NOT INCLUDING DAILY EDITIONS: 1 YEAR, \$8.00; 2 YEARS, \$14.00. SINGLE COPIES, 25 CENTS EACH. H. E. McCANDLESS, CIRCULATION MANAGER, 30 CHURCH STREET, NEW YORK 7.

### Tests Hold Key to Many Track Problems..... 268

In a two-direction, heavy traffic main track near Chicago, the Illinois Central installed a series of tests on ties, rail, fastenings, ballast and several other features of construction. The entire experiment on the 20-mile stretch of 131-lb. rail was designed so that results of no single test would influence any other.

### Robertson Fears Federal Tyranny..... 272

D. B. Robertson, president of the B. of L. F. & E., warning against a "drift toward an absolute or totalitarian state" in America, looks for our participation in the poverty of other nations, if those "opportunity clippers" who apparently command the government trends in our Capital City" succeed in reducing our standard of living, curtailing individual freedom and destroying opportunities for advancement.

### What Railroads Will Buy in 1944..... 275

Prospects are better than in any year since the start of the war, for the general easing of critical materials and steel for the building of new locomotives, cars, rail and work equipment. Purchases will be large, this analysis of the market reveals.

## EDITORIAL COMMENTS

Private Operation of Railroads Saves Taxpayers \$4 Billion....	265
Draft Gear and Coupler Maintenance.....	266
New Track Tests Promise Significant Data.....	266
Courtesy to Employees.....	267
Salute to the Army!.....	267

## GENERAL ARTICLES

Tests Hold Key to Many Track Problems.....	268
Robertson Fears Federal Tyranny.....	272
Boiler Check and Stop Valve.....	274
What Railroads Will Buy in 1944.....	275
Mexican Laborers Made Welcome on N. Y. Central.....	280
Locomotive Casualties and Defects Continue to Increase.....	281

## COMMUNICATIONS AND BOOKS..... 284

## RAILROADS-IN-WAR NEWS..... 286

## GENERAL NEWS..... 289

## OPERATING REVENUES AND EXPENSES.... 302

The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service



PRINTED IN U. S. A.

**by installing**  
**"Union" Coded Track Circuit Control!**



**RAIL TRANSMITTED  
SIGNAL CONTROLS**

**BETTER SHUNTING  
SENSITIVITY**

**LONGER  
TRACK CIRCUITS**

**INCREASED SAFETY  
OF  
TRAIN OPERATION**

**I**N addition to other important advantages, "Union" Coded Track Circuit Control provides for the elimination or reduction of signal-control line wires and cut sections.

Signal controls, in the form of coded current, are rail transmitted from the exit end to the entrance end of each track circuit. Furthermore, a reverse code may be used for the control of approach lighting, approach locking and other similar functions.

Since coded control permits operation of longer track circuits than are generally practical with steady-energy track circuits, cut sections are seldom required even with the longer signal spacing required for present-day, high-speed traffic.

**UNION SWITCH & SIGNAL COMPANY**

**SWISSVALE, PA.**



# The Week at a Glance

**AN "E" FOR THE ARMY:** If it were in the power of the railroads to bestow decorations for war jobs well done, they would surely pin one on the Army for its conduct in the period when the railways were under military control. An editorial herein reviews the circumstances—an honorable record of a difficult job, done with great foresight, wisdom, and restraint.

**SAVES TAXPAYERS 4 BILLION:** Private operation of railroads during this war has *already* saved American taxpayers \$4,000,000,000—compared to the added burdens they would have assumed had government operation been adopted, as in the last war. Clear calculations leading to this conclusion are given in the leading editorial in this issue.

**COST OF WAGE INCREASE:** The estimate is that the wage increases the railway unions won through the processes of the Railway Labor Act—plus the additional awards made following their calling a wartime strike—will cost the railroads \$360 millions a year with employment at its present level. Railroads prosperous enough to be in the high income tax brackets will not have to pay all the increase out of net income—since in such cases, the tax collector will share 50 per cent or more of the loss. Roads with poorer earnings, of course, will be proportionately the heavier sufferers in their net income accounts. And when present high earnings cease, the high labor costs will remain, unless readjustments are negotiated. The non-ops have, as the account in our news pages reveals, been awarded \$48,000,000 more than the "inflationary" 8 cents which Vinson denied them—thereby precipitating the present "non-inflationary" increases.

**BACK-PAY:** The sliding scale 4-to-10 cents increases awarded the non-ops are retroactive to February 1, 1943. The ops' 4 cents goes back to April 1, 1943. The additional "in lieu" increases, "arbitrated" by Mr. Roosevelt, are retroactive only to December 27. The accounting departments are busy with the back-pay computations. Dr. Leiserson has authorized the railroads to grant increases to employees not included under the agreements, in the same magnitude as the awards already made. The seven regional colonels, in charge of the railroads for the Army, will be back in mufti as soon as the final documents have been signed by the predominant proportion of the carriers involved.

**"TURNEY'S TURKEY":** When a federal appointee gets before the Senate for confirmation, he may expect some hazing—if he affords even an indirect opportunity for some senator to demonstrate his zeal for the public welfare, his wit, or his skill at innuendo. Such an instance—not unamusing either—occurred this week in the appearance of Mr. Eastman on Capitol Hill to be questioned regarding his and Mr. Rogers' fitness for reappointment to the I. C. C. Senator Wheeler was the inquisitor and he managed to inject questions regarding John Turney into his col-

loquy with Mr. Eastman. He wanted to know whether the O. D. T. certificate-of-war-necessity plan for trucks were known as "Turney's Turkey." Mr. Eastman, denying knowledge of the locution, said he didn't see what it had to do with John Rogers' qualifications for the I. C. C. The Senator observed that he didn't like the idea of a man working for a commission and resigning to practice at its bar—which, of course, was not what Mr. Turney did. His practice is before the I. C. C., while his job was with the O. D. T.

**WELCOMES MEXICANS:** The New York Central, which has 1,650 Mexicans working at various points on its system and would like to have many more, is doing its best to make conditions comfortable and interesting for the visitors—as a short article herein reveals. The men are housed in well-planned barracks and great care has been exercised to provide them with attractive food and amusements. A special edition, in Spanish, of the road's employee publication, "The Headlight," features the visitors from south of the border—and the company hopes that, as present employees send these copies to Mexico, more nationals of that country will interest themselves in a tour of duty on its payroll.

**PLANNED TRACK TESTING:** Almost every element in track construction—including ties, tie plates, tie plate fastenings, rail anchors, joint bolt tension, joint expansion gaps, joint lubrication, and types of ballast—is under test in a 20-mile stretch of heavy-duty main track on the I. C. in the Chicago area. The article on page 268 describing this installation emphasizes the effectiveness of careful planning to accomplish a definite purpose, as the track design was so worked out that the wide range of tests could be carried on independently, each one uninfluenced by any abnormal characteristics associated with the others.

**ACCIDENT RECORD NOT BAD:** Recommendations for the I. C. C.'s appropriation for the next fiscal year were reported this week (as is recorded in our news pages) and therewith was made public the questioning of Commissioner Mahaffie when the I. C. C.'s estimates were before the House Appropriations Committee. Congressman Woodrum (Va.) asked Mr. Mahaffie what he thought of railway accidents, and the Commissioner said it was a wonder there weren't more; he thought the record was excellent. Mr. Woodrum agreed saying that the railroads are "the unsung heroes of the war."

**WAGE AWARDS BINDING?:** At least for the war's duration, acceptance of wage awards by Emergency Boards named under the Railway Labor Act should be made obligatory on both parties. Such is the conclusion of Vice-President Fletcher of the A. A. R. (speaking unofficially) in an address at New York this week, reported in an article on page 272 in this issue. He also inclines to the opinion that railway wages might well be specifically excepted from the processes of the Stabilization Act.

**PURCHASES IN 1944:** The authorities who allocate scarce materials are now much more attentive to railroad needs, and the bureaucratic ritual for obtaining what is wanted has been simplified. The result is that railroad prospects for securing materials and equipment they genuinely require are much improved. Our purchases and stores editor, in an article herein, examines each important category of articles railroads normally acquire and—weighing both supply and demand factors—assays the probable trend of acquisitions during the current year. There is information here of interest to railway officers who need something pretty acutely to better their operations—and are wondering what their chances of getting it are. For most things, it looks as if the prospects of success are a good deal brighter than some might think—that is, if the effort at acquisition is pushed with intelligent vigor.

**LOCOMOTIVE CONDITION:** The always-revelatory annual report of the Bureau of Locomotive Inspection is reviewed in an article in this issue—this year's report being especially significant because of the unprecedentedly intense utilization of power in the period covered. The ratio of inspected steam locomotives found defective was 10 per cent—exactly the same as in the preceding year. There was, however, an increase of 44 per cent over the previous year in the number of accidents attributable to locomotive failure.

**WOULDN'T CHANGE HORSES:** Because he couldn't see that any good would result, while he had no doubt that much would be lost, by setting aside private management when it was working so well, Joe Eastman didn't favor government operation at the onset of this emergency, he told a gathering of economists and political scientists last week, and two years' experience hasn't changed his mind. At the same time, he isn't completely sold on the theory that World War I experience with political management of railroads was, comparatively, such a horrible failure, because things then were in worse shape to begin with. As reported in our news pages, he thinks there are several reasons for the differences in the roads' records in the two wars, most of them beyond the control of management.

**ROBERTSON ON PRINCIPLES:** The president of the Brotherhood of Locomotive Firemen & Enginemen at a session of the Economic Club in New York this week presented an exegesis of the fundamental principles on which this nation achieved its present might—and which are now being undermined by political forces whose identity Mr. Robertson hinted at but did not name. (See page 272).

**BIG 3 FORWARDERS:** In 1942 three forwarding companies—Universal, National, and Acme—had 79 per cent of the gross business of all forwarders reporting to the I. C. C. This disclosure and figures of forwarders' net earnings have been released by the Commission's Bureau of Statistics, reported in our news pages.





# Another Triple- GM DIESEL SERVICE

THE Burlington, the first railroad to adopt Diesel motive power for passenger service and which, in 1934, introduced "The Zephyr," America's first Diesel-powered streamlined train, recently placed in service the first two of sixteen General Motors 5400 Hp. Diesel Freight Locomotives — acquired to meet present wartime demands and to "streamline" freight service in the postwar period. These freight Diesels, in addition to the GM Diesels in switching and passenger service, will give the Burlington a Diesel *triple service* of 134 power units totaling 164,600 horsepower.



★ LET'S ALL BACK THE ATTACK — BUY MORE WAR BONDS ★

## ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION

LA GRANGE, ILLINOIS, U.S.A.

# RAILWAY AGE

## Private Operation of Railroads Saves Taxpayers \$4 Billion

The best estimates that can be made indicate that the federal government already has saved the public about \$4 billion in taxes by refraining from adopting government operation of railways during the present war period, and that the saving will be increased to more than \$5 billion in 1944.

These estimates by *Railway Age* are made by the simple process of comparing what actually occurred in the so-called "guaranty period" of 32 months during and following World War I, and what actually has occurred during the last 32 months and is still going on.

Under government operation in World War I the government guaranteed the railways the same average annual net operating income that they had earned in the three years ending June 30, 1917. Government operation lasted 26 months—from January 1, 1918, to March 1, 1920. Throughout this time, in spite of large advances in rates, the government incurred deficits which finally had become so large that to have returned the railways to private operation without extension of the guarantees would have bankrupted most of them. Consequently, the government extended its guarantees to cover the first six months after resumption of private operation. The total railway deficit incurred in the entire 32 months of guarantees, and which the nation's taxpayers had to defray, was about \$1,600 million.

There was almost no increase in railway taxes during the World War I "guaranty period." On the other hand, the income taxes levied on the railways by the federal government during the last 32 months were: Last eight months of 1941, \$140 million; year 1942, \$759 million; year 1943, \$1,390 million; 32 months' total, \$2,290 million. Therefore, the difference between the taxes that had to be collected from the public to pay the deficit incurred owing to government operation during the last war period, and the income taxes that have been levied by the federal government in the same length of time on the railways under private operation during the present war period, is \$3,890 million.

Of course, the principal reason why the government incurred such a large railway deficit during the last war period, and has been able to levy such huge income taxes on the railways during the present war period, is that under government operation during the last war period the net earnings of the railways from operation greatly declined, while under private management during the present war period their net earnings from operation have greatly increased.

In spite of large advances in both freight and passenger rates, their net earnings from operation (before taxes)—as compared with 1917—declined \$286 million in 1918; \$440 million in 1919; and \$734 million in 1920. On the other hand, in spite of declines in their revenue per ton-mile and passenger-mile, their net earnings from operation (before taxes)—as compared with 1940—increased \$475 million in 1941; \$1,658 million in 1942; and almost \$2,000 million in 1943. The great difference in the results of operation during the two war periods is plain—and equally plain is the difference in results to the American taxpayer, when it is considered that in 1943 the federal government not only did not, because of a decline of net earnings, incur any railway deficit to be paid from taxes, but took in income taxes 70 per cent of the increase in net earnings (over 1940) achieved by efficient private management.

Nobody knows just how different railway results during the last war would have been if the Wilson administration had not adopted government operation. But the contrast between the actual results

Efficiency  
FOR VICTORY



under government operation during that war and under private operation during this war shows that, especially from the standpoint of the taxpaying public, the Roosevelt administration has made no mistake in adhering to private operation excepting briefly during the recent threat of a strike.

## Draft Gear and Coupler Maintenance

Some disturbing facts have been developed in a "roundtable" discussion on coupler and draft gear maintenance conducted by the "Railway Mechanical Engineer." It was pointed out, for instance, that coupler and draft gear failures rank second in road failures and third in terminal delays. A report from the Chicago territory indicated that of all the loaded cars shipped for repairs in that district about seven per cent are due to defective couplers or draft gears. About 700,000 freight cars are now equipped with A. A. R. approved draft gears. This is only one-third of the total number of cars in service, but there seems to be little question but that it has had a beneficial effect upon freight train operation.

The problem now appears that of making the entire railroad organization more draft gear conscious. There has been a mistaken impression, for instance, that the draft gear should have the same life as the car and that it requires little care and maintenance. Its function is to protect the car structure and the lading against all types of shock. As one master car builder explained, "draft gears are hard working and much abused parts, and wear and breakage are to be expected." This same officer pointed out that it is highly misleading to judge the efficiency of a gear by its condition after a certain period of service. "Obviously," he said, "a shirker will show up much better than one that is really doing what it is put there for, and inversely, the gear that is really functioning will show more wear, since it is not only doing its own work, but is also doing the work of the slacker."

The situation in recent months has been made all the more difficult because of the heavier and longer trains and the more intense utilization of equipment under war conditions. The problem has been intensified by the shortage of manpower and the difficulty in making as close and accurate inspections as is desirable, and of taking up the excess slack and keeping the couplers and draft gear in prime condition. This suggests that the supervisory staff should make every possible effort to educate the operating men in proper train handling, to prevent unnecessarily severe shocks, and that critical attention should be given by the inspectors and the car repairers to checking and correcting the details which are responsible for coupler and draft gear failures. The task was not any too well done under normal operations in the pre-war period. It is imperative today to insure that the draft gear is properly adjusted and maintained.

## New Track Tests Promise Significant Data

It is inherent in engineering and maintenance of way officers of the railways to be interested in studies and tests of the wide variety of materials, devices and methods involved in track construction and maintenance. Therefore, these officers will take more than passing interest in the extensive and varied track tests which the Illinois Central is initiating in its main tracks near Chicago, and which are described in this issue.

Since the early days of railroading, engineering and maintenance of way officers, individually and jointly through their various associations, have given concerted attention to the design, quality and adaptability of the various elements of the track structure, including rail, rail fastenings, ties, ballast, and a multitude of arrangements of these materials under various physical and traffic conditions. They have conducted hundreds of field tests, because experience early taught them that, with respect to elements of the track structure, individually or in combination, there is no adequate substitute for such tests. Shop and laboratory tests have often proved of great value in track development work, in showing the way, in bringing to light inherent weakness or inadequacy, and in indicating the character of results that can be expected in service. As such, they have a valuable place in the development of track standards. But, no matter how elaborate or thorough these tests may be, the last chapter must always be written in the field under actual service conditions, and that is what the Illinois Central is doing in its field tests.

Many track tests in the past have fallen short of their initial purpose through faulty installation or lack of adequate follow-up to appraise results accurately. Too often, also, the results of these tests have been given inadequate study and publicity, and their value has thus been lost in part. However, much of the progress in track design and construction over the years, which has made American railway track standards second to none in the world, and far superior to most, can be attributed to the results of these tests.

The fact that the Illinois Central initiates such detailed tests at this time is no reflection on previous tests. In fact, several of its tests are new in character and promise to divulge new information. Even those tests that are similar to tests that have been conducted earlier promise to bring out information of value to the Illinois Central in meeting its specific conditions, and to other roads with similar conditions.

The Illinois Central is to be commended for its initiative and foresight in undertaking these tests. It is another indication that engineering and maintenance officers will never be satisfied with their standards of track construction and maintenance until the ultimate strength, stability, riding comfort and economy are achieved.



## Courtesy to Employees

A necessary step in inducing employees to be courteous to patrons is, first, for their superiors to be courteous to them. To be reliable, courtesy has to become a habit—"the man who puts it on like a mask now and then will sooner or later forget and leave it off." Such is the observation of the A. A. R.'s Committee for the Study of Transportation (subcommittee on labor and personnel), as set forth in its admirable Report on Public Relations Training for Railroad Employees—a document which could be read with profit by every intelligent person on the railroad payroll.

There still persist some old-school railroaders who cherish untimely prejudices regarding the necessity for and means to favorable public relations. Either they regard efforts to cultivate friendly public opinion as "bunk" (saying, "our job is to provide transportation, not to explain our business to the public"); or, which is just as much an error, they believe they can create favorable public relations merely by hiring a press agent, while they continue to railroad as they have always done.

The increased present-day importance of co-operative public opinion to the successful operation of a railroad arises from changes in the past two decades in the economic and political "climate." When there were few alternative means of transportation available, the good-will of prospective customers was not so necessary as it is now to the maintenance of revenues. Also, decisions in matters of railroad policy have come more and more under political control and these decisions cannot be otherwise than harmful if public opinion is poorly informed and unfriendly. An illustration of this condition is afforded by a recent spectacular railroad accident, which led some newspaper writers and radio commentators to dogmatize on the kind of safety equipment with which railroads should be required by law to equip themselves. If railroad managements had not currently succeeded (as well by a skillful program of public information as by actual performance) in convincing most people that they are fully competent in their jobs, this adverse comment would beyond question have been much more widespread and insistent than it was; and would, quite likely, have resulted in legislation prejudicial both to railroad earnings and to genuine progress in safety.

The old-timers are right in their belief that a railroad man's first duty is to do a good job of railroading—but securing public acceptance of the performance is, nowadays, just as important as doing the job right; because unless public acceptance is secured, a good job of railroading cannot continue to be done. Failing such public acceptance, the railroads' operations will be unwisely obstructed by further legislative or regulatory circumscription and they will lose more traffic to competitors.

A transportation job well done; employees who are both courteous and who know enough about railroad

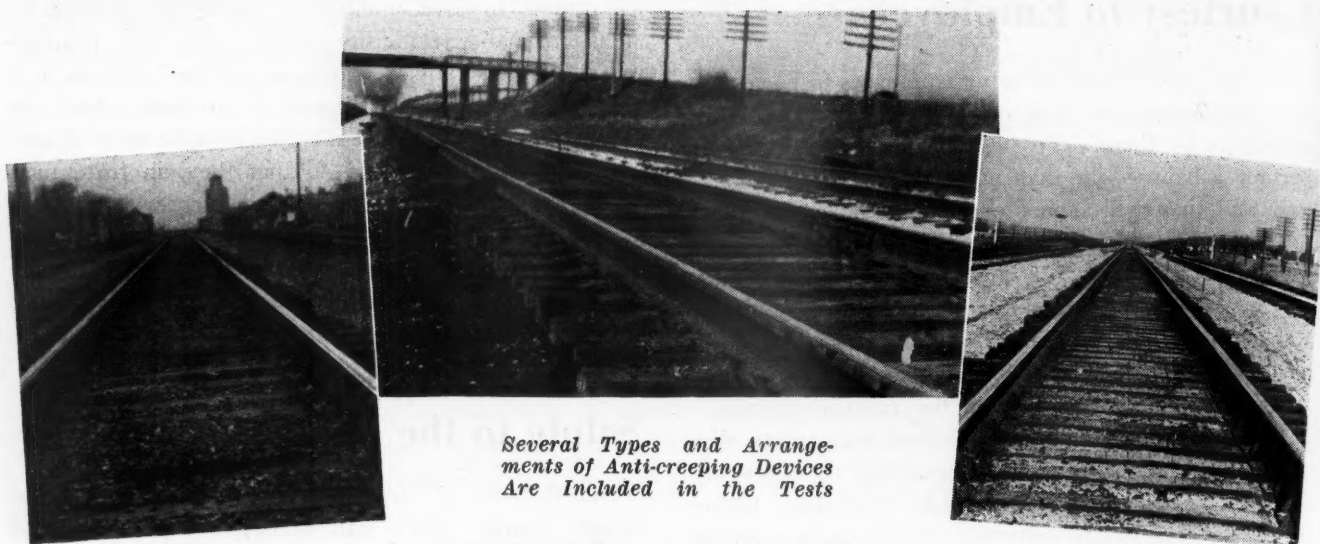
operations to give intelligent answers to customers' questions and criticisms—these are the primary requisites of a public relations "climate" in which it will be possible for railroads to prosper. And the initial duty is management's—by being courteous and informative to employees so that they, in turn, may be equipped and inspired to deal similarly with the public. A competent public relations officer can set up the sign-posts toward such a goal, but he cannot provide the motive power to achieve it. Only a sympathetic top management can do that.

## Salute to the Army!

Self-restraint is the most admirable, and also the rarest, quality which can accompany possession of great power. The highest commendation, therefore, is due the Army—from the Commander-in-Chief right on down—for the manner in which it conducted itself in its brief possession of the railways. It moved in far enough to secure the necessary contacts within the industry to enable it to act swiftly in the event that untoward occurrences should make necessary the use of military force, but it stopped short of any interference whatsoever with operations. As far as our information goes, it did not even succumb to the temptation to suggest to other government agencies that, the Army having the situation well in hand, these other agencies might relax their vigil.

That such restraint was the course of wisdom in the Army's own interest does not detract in the slightest from the credit due. The railroads have made their astonishing record in handling the war load precisely because of the thoroughness with which they have decentralized authority and responsibility. Not one person or one office, but thousands of individuals and organizations all over the country, have partaken in the management which has squeezed so much more work out of the railroad plant than the most optimistic would have dared predict two years ago. Any intimation that this widely-diffused authority was to be gathered into one spot would have brought on a rapid relinquishment of the equally-widely-diffused responsibility for maximum utilization of facilities and equipment, with disastrous consequences. And any organization which should take over the railroads, with their record to date, and achieve much poorer results, would surely be on the spot.

The Army, having since the last war maintained close liaison with the railroads, and having in its organization many capable transportation men, was fully aware of the desirability, in its own interest as well as of the nation, that it avoid the untoward consequences of even a hint that it had taken unto itself authority over railway operations. It is one thing, however—motivated by long-run considerations—to set an objective, and quite another to win it. The Army did both jobs with skill and thoroughness.



*Several Types and Arrangements of Anti-creeping Devices Are Included in the Tests*

# TESTS

## Hold Key to Many Track Problems\*

**Twenty-mile installation on the Illinois Central near Chicago includes rail, ties, ballast and a wide range of track fastenings**

**W**HEN the Illinois Central laid 131-lb. rail on a 20-mile stretch of two-direction, heavy-traffic main track near Chicago during the last summer, its initial installation of rail of this section, it took the opportunity afforded to use this piece of track as a test section to obtain as much information as possible concerning the best practices in track design to be followed in future installations of 131-lb. rail. Accordingly, tests were installed in this track including ties, tie plates, tie plate fastenings, rail anchors, joint bolt tension, joint expansion gaps, joint lubrication, types of ballast, and several other features of track construction, including a section of asphalted ballast. A significant feature of these tests is that the entire series was so designed that the results of no one of the individual tests will influence the results of any of the other tests.

This 20-mile test section is located between Monee and Kankakee, Ill., in three-track territory, or the middle track—Number 2—which carries traffic in both directions. Number 1 track carries southward trains only, and Number 3 track northward trains only. The test main, Number 2, carries in excess of 20 million gross tons per mile per annum, which is more than enough to justify the use of 131-lb. rail.

Monee, Ill., at the north end of the test section, is 34 miles south of Chicago, and is on the divide between the Great Lakes and the Mississippi valley. Kankakee, Ill., at the south end of the test section, is 56 miles south of Chicago, and is about 150 ft. lower than Monee. Between these two towns there is only one curve, a 45-min.

curve which is 1800 ft. long, and the maximum gradient in both directions is about 0.4 per cent.

Considering its proximity to Chicago for observation, and its traffic, grade and alinement conditions, with a rather wide range of temperature, this 20 miles of new 131-lb. rail is in about the most desirable location on the entire railroad for making track tests.

Just prior to the installation of our tests and the laying of the 131-lb. rail in the test territory, a Speno ballast cleaning machine was operated over the three tracks to clean the ballast shoulders, including all ballast in the inter-track spaces. In this work, wherever an unusual amount of moisture was observed, the location was marked for the installation of cross drains to draw water out of the inter-track space, and where an unusual volume of muddy ballast was encountered, further investigation was carried out, which resulted in several rather extensive installations of sub-drainage.

### Variety of Joint Tests

The first 131-lb. rail was laid at M. P. 35 at Monee, on June 22, and the work progressed southward. All the rail was control-cooled and end-hardened. An attempt was made to lay 10 miles with standard A. R. E. A. expansion, 5 miles with one-half of standard and 5 miles with one-quarter of standard expansion, but because of high temperatures which prevailed during the laying, the results are not as satisfactory as they would have been if the rail had been laid earlier or later in the year.

Joints in road and street crossings and along station

\* Abstract of a paper presented before the Maintenance of Way Club of Chicago.





Various Types of Joint Fastenings and Joint Lubrication Are Included in the Tests, All in Connection with Six-Hole, Head-Free Joint Bars



platforms between insulated joints were butt-welded. These stretches of continuous butt-welded rail are from two to ten rail lengths long. Elsewhere throughout the test area, six-hole, 36-in. head-free joint bars with 2½-in. by 6½-in. by 6½-in. punching were used, with 1½-in. by 6-in. bolts. Tension tests were conducted on the bolts on July 28, 29 and 30. Fifty joints on the west rail were placed under test, beginning at M. P. 45, at the middle of the 20-mile section, and continuing southward. The mill scale was thoroughly cleaned from both the joint bars and the rail ends of the first 25 joints, employing an acetylene torch and a steel wire brush. The bolts for this test are the regular standard track bolts used elsewhere throughout the test track, except that they were specially prepared in the maintenance of way department equipment shop of the Illinois Central with strain gage holes in each end for taking the bolt tension readings.

The next 25 joints to the south were applied in the usual way, using the material in the same condition as received from the manufacturer. The purpose of these tests is to determine whether the removal of mill scale from the rail ends and joint bar fishing surfaces will reduce the high initial rate of bolt tension loss or have

any beneficial effects on reducing the joint bar wear. The insulated joints used in the tests are the armored type of The Rail Joint Company. Spring washers, or nutlocks, are used on all joint bolts from M. P. 35 to M. P. 50, and Triflex springs are used on all bolts in the south five miles of the test section.

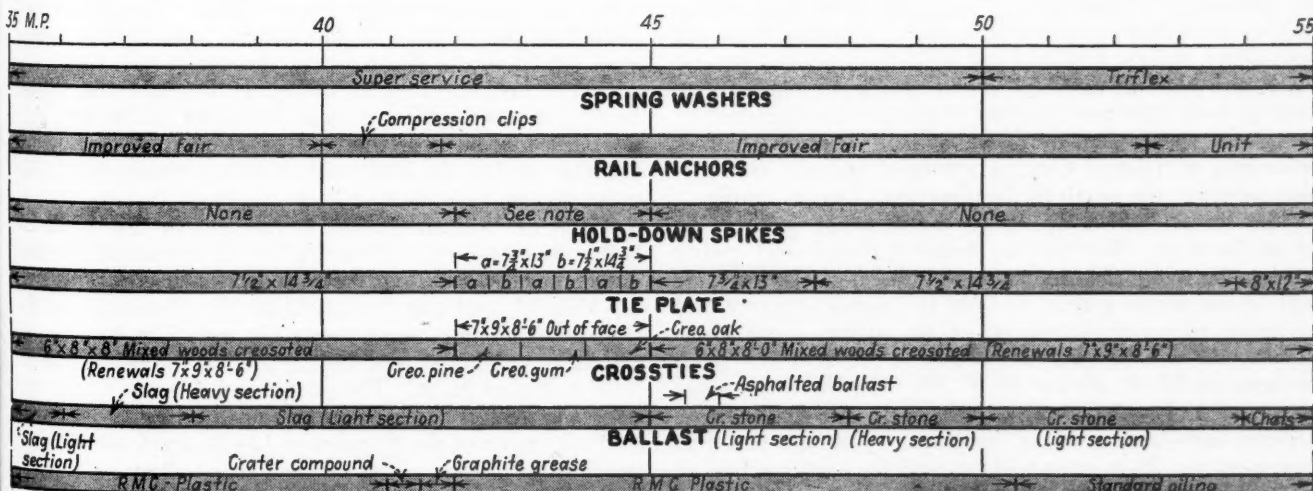
R. M. C. plastic joint lubricant was placed between all joint bars and the rail on Miles 36 to 41, inclusive, and from M. P. 42 to M. P. 50.5. The joints on the north half of Mile 42 are lubricated with Crater compound, and those on the south half with graphite grease. From M. P. 50.5 to M. P. 55, the rail ends were oiled in the usual manner before the joint bars were hung, using Texas 45 joint oil.

### Seek Proper Design of Tie Plate

Present and probable future traffic conditions on those parts of our railroad where we plan in the future to lay new 131-lb. rail and to use new tie plates emphasize the importance of proper design of the tie plates. Indications are that if tie plates are designed properly, with sufficient bearing area and strength, and are held firmly to the ties, penetration in the ties will not only be reduced materially, but uneven settlement of the plates inside and outside of the rail will be eliminated.

We know that our 7¾-in. by 11-in. tie plates for 112-lb. rail, which have 1⅜-in. eccentricity, settle into the ties under heavy traffic, especially where softwood ties are used, resulting in excessive mechanical wear of the ties and tight gage. The tendency to tight gage has been met on our railroad in the past by using track gages ⅛ in. longer than standard when laying new rail, but this practice was discontinued in March, 1941, when we began our investigation into the use of larger, more evenly balanced tie plates.

Recent inspection on the Illinois Central of 7¾-in. by 11-in. double-shoulder tie plates laid new with 112-lb. rail in 1937 and 1938, on tangent track carrying approximately 20 million gross tons of traffic per year, showed that the tie plates were sinking into the ties with a decided cant to the inside, indicating that the pressure of the plates on the ties was not uniform. Plate cutting



Note: For hold-down spikes :- Each half mile of track divided into seven equal sections as follows

- (a) No spikes
- (b) 4 Screw spikes, no washers
- (c) 2 Screw spikes, no washers
- (d) 4 Screw spikes, each with one double-coil spring washer
- (e) 2 Screw spikes, each with one double-coil spring washer
- (f) 4 Cut spikes
- (g) 2 Cut spikes

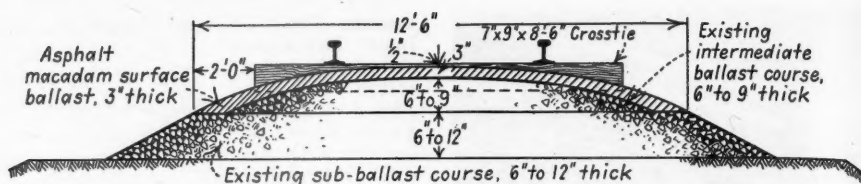
All joint bars - 36"-6 hole  
All track bolts 1½"x6"  
All rail ends hardened  
Bolt tension tests on 50 joints south from M.P. 45 (West rail only)

Diagrammatic Plan of the Various Tests Included in the Illinois Central Installation





## Cross Section of the One Half Mile of Asphalted Ballast Section



under heavy traffic, especially where softwood ties are used, is a major problem. Therefore, of all the tests that we are conducting on our test track or could conduct, we consider this test of the proper design of tie plate of the greatest importance.

In our tie plate test,  $7\frac{1}{2}$ -in. by  $14\frac{3}{4}$ -in. tie plates were laid out-of-face on Miles 36 to 42, inclusive;  $7\frac{3}{4}$ -in. by 13-in. plates were laid on each alternate half mile from M. P. 42 to M. P. 44.5, and  $7\frac{1}{2}$ -in. by  $14\frac{3}{4}$ -in. plates were laid on the other alternate half of each mile from M. P. 42 to M. P. 45. From M. P. 45 to M. P. 47.5, the  $7\frac{3}{4}$ -in. by 13-in. plates were again used out-of-face, changing back to the  $7\frac{1}{2}$ -in. by  $14\frac{3}{4}$ -in. plates out-of-face for the ties from M. P. 47.5 to M. P. 53.8. From M. P. 53.8 to the south end of the test track at M. P. 55, a wider but shorter plate, 8-in. by 12-in., was installed.

## Spike and Anchor Tests

The  $7\frac{1}{2}$ -in. by  $14\frac{3}{4}$ -in. tie plates, which has  $\frac{1}{2}$  in. eccentricity, weighs 22.14 lbs.; the  $7\frac{3}{4}$ -in. by 13-in. plate with  $\frac{9}{32}$  in. eccentricity, weighs 19.12 lb., and the 8-in. by 12-in. plate, with  $\frac{11}{32}$  in. eccentricity, weighs 16.41 lb. All plates have flat bottoms and a cant of 1 in 40, and all but the 8-in. by 12-in. plates have a greater percentage of their length on the inside, or gage end, than our present standard  $7\frac{3}{4}$ -in. by 11-in. tie plate for 112-lb. rail.

The desirability of having tie plates fastened securely to the ties has been mentioned. We propose to investigate various systems of fastening the tie plates to treated pine, treated gum and treated oak ties. The purpose of our test in this regard is to demonstrate the benefits to be gained by anchoring the tie plates firmly to the ties, and to compare the results obtained by different methods of fastening. Tests are to be made with four screw hold-down spikes, two screw hold-down spikes, four cut hold-down spikes, and two cut hold-down spikes per tie plate, and without any hold-down spikes per plate. The rails in each case are fastened to the ties independent of the plates with  $\frac{5}{8}$ -in. by  $\frac{5}{8}$ -in. by 6-in. cut track spikes according to Illinois Central standard spiking, the outside spikes to the north in the direction of heavy traffic.

The screw hold-down spikes to be employed will be  $\frac{7}{8}$  in. by 6 in. We plan to install a double-coil spring washer between the tie plate and the head of each of half of the screw spikes, to hold the plates securely and to avoid frequent tightening of the spikes. No hold-down spike will be used between M. P. 35 and M. P. 42, or between M. P. 45 and M. P. 55. On the three miles between M. P. 42 and M. P. 45, each half mile will be divided into about seven divisions. For all practical purposes, ten 39-ft. rails will be used for each method of fastening of the plates to the ties.

In our rail anchor tests, 14 anchors were applied per rail, 8 against northward movement and 6 against southward movement. Following this arrangement, Improved Fair rail anchors were applied on Miles 35 to 40, inclusive, and from M. P. 41.8 to M. P. 52.5, and Unit anchors were applied between M. P. 52.5 and M. P. 55. Supplementing these comparative installations, twelve rail

clips were installed per rail length between M. P. 40 and M. P. 41.8.

Tests of different ways of grouping or distributing rail anchors on each rail length and in the use of different numbers of anchors per rail length were considered, along with other tests, but before details were worked out the new 131-lb. rail was laid and anchored as already described, and it would have required considerable time and labor to rearrange the anchors. However, when it was decided to lay 11 miles of new 112-lb. rail on the adjacent Number 3 track, we agreed to make such tests on that track as desired by Subcommittee 10 of the Track committee of the American Railway Engineering Association, in an attempt to determine the most efficient method of applying rail anchors.

As mentioned previously, all trains move northward on Number 3 track. Therefore, except to take care of some back-up movement, it was necessary that the anchors be applied against northward creepage. Eight different methods of applying the anchors were used for this test, as shown in one of the accompanying illustrations.

Representatives of the A. A. R. set 72 test points, 8 on each of the 8 miles, with A. R. E. A. anchor arrangements, and 8 on Mile 55, anchored by the Illinois Central method, which calls for eight anchors, four on each half rail, on each alternate tie commencing with the third tie away from the joint.

## Switch, Tie and Ballast Tests

The switches in the test installation are equipped with Ramapo Ajax Type M head rods, and at interlocking plants with Type MF front rods for locking the switches. These rods are vertical rather than flat, and have a swivel bearing clip of cast steel, machined to insure that the switch point will lie up tight against the stock rail. This alone will keep the points from rolling. The Type MF front rod for locking at interlocking plants has a cast steel swivel clip in place of our present curved rod.

Switch heel and turnout plates are  $1\frac{1}{8}$  in. thick, milled to a  $\frac{3}{4}$ -in. seat, giving a  $\frac{3}{8}$ -in. shoulder which will help hold the line back of the heel of switch. Milled plates are also used at the heel and toe ends of frogs, with 1-in. holes for screw spikes to keep the frogs in line.

Three miles in the middle of the 20-mile test track are laid with new 7-in. by 9-in. by  $8\frac{1}{2}$ -ft. creosoted crossties out-of-face. Pine ties were used on Mile 43, gum ties on Mile 44, and oak ties on Mile 45. Renewals on the remaining 17 miles were spotted in with 7-in. by 9-in. by  $8\frac{1}{2}$ -ft. oak, gum or pine ties, replacing the 6-in. by 8-in. by 8-ft. ties in place. The purpose of this test is to compare the performance of pine, gum and oak ties. The north 10 miles of the 20 miles of 131-lb. track were raised approximately six inches on new slag ballast. The next nine miles were put up on about six inches of crushed stone ballast. The most southerly mile in the test section will be maintained for the time being on chats.

From M. P. 35 to M. P. 40, the first raise was made on the old stone ballast. On Miles 41 and 42, all ballast was removed from between the ties to the bottoms of the ties and the entire raise was made on new slag. The first raise was made on the old ballast from M. P.

42 to M. P. 49, and then again all old ballast was removed from the cribs and the entire raise on Miles 50 and 51 was made on new stone ballast. From M. P. 51 to M. P. 54, the track was raised first on existing stone ballast. A minimum running surface was made on the chat ballast on Mile 55, Kankakee Yard.

We are dressing the ballast section in two ways. One, called the full, or heavy, section, leaves the ballast around the tie ends, dressed off only two inches below the tops of the ties, while the other, referred to as the light section, leaves no ballast at the tie ends, to the bottoms of the ties, for better drainage. The manner of dressing the ballast on each mile is as follows:

M. P. 35 to M. P. 36	Light section of slag
M. P. 36 to M. P. 38	Heavy, full section of slag
M. P. 38 to M. P. 45	Light section of slag
M. P. 45 to M. P. 48	Light section of stone
M. P. 48 to M. P. 50	Heavy, full section of stone
M. P. 50 to M. P. 54	Light section of stone
M. P. 54 to M. P. 55	Chat

### Half Mile of Asphalted Ballast

The New York Central made an installation of asphalt-impregnated ballast in 1939 to overcome especially bad drainage and subgrade conditions on one of its high-speed tracks at Bryan, Ohio. This installation was quite deep, extending below the bottoms of the ties.

Subsequently, W. R. Macatee of the Asphalt Institute, Washington, D. C., conceived the idea of providing a comparatively thin coating of asphalt over ordinary ballast to serve as a "roof" to drain water off the ballast section and to prevent fouling of the ballast by the infiltration of soil blown in from plowed fields, coal dust and cinders from passing trains, and limestone dust from ground-up pieces of crushed stone ballast. The theory behind this "roof" arrangement is that the ballast under the ties, if kept dry, will have a higher co-efficient of friction against being dislodged laterally into the space between ties, and that the binding together of the top surface of the ballast will tend to provide additional restraint against similar movement of the ballast, thus extending the time between necessary out-of-face repairs and renewals and the cleaning of the ballast.

Authority was obtained to install a half mile of this self-draining, non-fouling asphalt macadam surface ballast and the south half of Mile 46 was selected for the installation. The expense of this experiment was distributed among the Texas Company, the Association of American Railroads, the Lehigh Stone Company and the Illinois Central.

This type of asphalted ballast installation was something entirely new to the asphalt producers and the railway forces. Accordingly, the work had to be planned as well as possible, based upon what could be anticipated. It was to be expected that in the course of the work—and in particular this pioneering work—improved methods would be developed, which was the case.



All of the Interlocked Switches in the 20-Mile Test Section Are Equipped with Ramapo-Ajax Vertical, Type-M Head Rods and Type-MF Front Rods

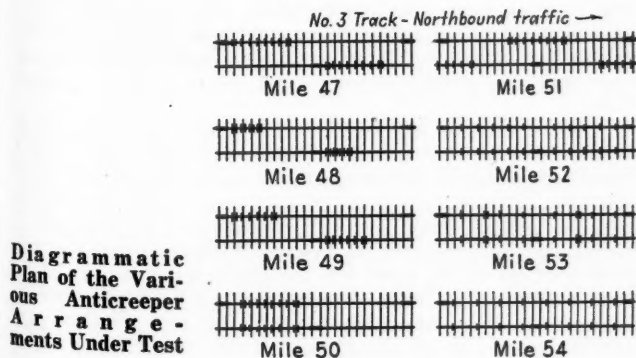
The stone ballast was sprayed with the hot asphalt at the rate of two to three gallons per square yard. The ballast was dry and the asphalt penetrated approximately three inches below the surface. Immediately following the application of the asphalt, stone screenings, passing a  $\frac{3}{4}$ -in. screen and retained on a Number 4 mesh screen, were spread lightly over the asphalt and tamped into the interstices, employing iron asphalt tampers for this purpose. A second or sealer coat of hot asphalt was then applied and promptly covered with a thin layer of fine stone aggregate, while the asphalt was hot. This sealer coat consisted of approximately four-tenths of a gallon of asphalt per square yard. The cover-coat aggregate was broomed by hand to effect uniform distribution.

The asphalt was pumped from a railroad tank car, under steam heat from the locomotive hauling the car to an automobile truck pressure distributor carried on an adjoining flat car. The work was begun by using a single hand-held hose with a spray attachment to apply the asphalt. This was changed to a spray-bar attachment of the type used in building bituminous macadam highways, which speeded up the work. The small stone and screenings were shoveled out of a gondola-type coal car pulled along by means of a cable attached to the flat car carrying the distributor truck. Wood guards were moved along on top of the rails between the flat car and the stone and screenings car as the work progressed, to keep the top of the rail free of asphalt.

The strip of ballast so treated in this test is  $12\frac{1}{2}$  ft. wide, extending 2 ft. beyond the ends of the  $8\frac{1}{2}$ -ft. cross-ties. A total of 7,200 gal. of asphalt was used in approximately 2,480 track feet of ballast section. The work was completed on September 10. Observing some movement in this asphalt "roof" under traffic, the spikes were "cracked" about  $\frac{1}{4}$  in. on the south half of the installation to allow for the wave motion of the rail.

Labor shortages slowed up the progress of the work on all of the test installations. The use of a power cribbing machine, a power ballaster, and several electric tamping machines, following a fully mechanized rail laying gang, was effective in carrying out the heavier phases of the work, but a number of the details of the work are not yet completed.

The tests described in this paper were installed and will be carried forward under the direction of C. H. Motier, chief engineer of the Illinois Central. G. M. Magee, research engineer for the AAR, is interested in the rail expansion, bolt tension, tie plate penetration, joint lubrication, rail anchor application and asphalt ballasted tests, and is co-operating with the Illinois Central in preparing the tests and in compiling the test records.





# Robertson Fears Federal Tyranny

**Firemen's chief warns of tendencies here similar to those our armies fight against abroad—Fletcher favors making emergency board decisions binding**

**P**RESIDENT D. B. Robertson of the Brotherhood of Locomotive Firemen & Enginemen on January 26 warned against the "drift toward an absolute or totalitarian state" in America, strongly supported private ownership and management of the railroad industry, and expressed his fears lest the federal government reduce the standard of living in America that we may participate in the poverty of other nations. R. V. Fletcher, vice-president of the Association of American Railroads, on the same occasion, expressed his conviction that, for the duration of the war, decisions of emergency boards named under the Railway Labor Act should be binding on both parties.

These statements were made in addresses at a meeting of the Economic Club of New York, where the special guests of honor were Director Joseph B. Eastman of the Office of Defense Transportation and President John J. Pelley of the Association of American Railroads. Mr. Fletcher eulogized the recipients of this honor, saying of the O. D. T. director that, of "the roster of men prominent in official life, I think I can say with confidence that Mr. Eastman's name leads all the rest in his single-minded and wholehearted devotion to the public service. . . . All of us connected with transportation look to him for guidance, with absolute confidence in his integrity and trusting implicitly in his ample endowment of common sense." He credited Mr. Pelley with leadership which has enabled the railroads so well to meet the transportation demands of the nation at war, and especially felicitated him for his important contribution to the peaceful settlement of recent labor disturbances.

Said Mr. Robertson in part:

"I am proud of the record of our industry. The fulfilling of the vast requirements for transportation during this time of war, so well met by the American railroads, is well known to all of us. This has been due indisputably to the excellent co-operation which the nation has had in abundance from the Office of Defense Transportation, the Army and the Navy, railroad management and railway labor.

## Prosperous Railways, Prosperous Labor

"The problems of transportation for the peace-time will be considered seriously this year. Unlike other war industries, the railroad industry will not need to answer the question of what to do with new war plants, whether to close them or keep them open. The railroads became a war machine overnight, and they will become a peace machine overnight. The use of the railroad plant has been so heavy that unquestionably great replacements and the making up of much deferred maintenance will be required.

"Then there will be the problem of the place the railroads will maintain in the national transportation pattern, as against other modes of transport. I am informed that many of the railroads have considerably improved their financial status so they will enter the period of peace with many advantages.

"Colonel Williamson knows my attitude concerning our desire to co-operate in solving problems where our support might be most helpful. Whatever improves our industry improves the

status of railway labor. Our interests are co-equal with those of management in that respect. We do know that the only way to better ourselves is by everlasting progress in the art of transportation, and I can give personal assurance that I will approach the post-war period constructively when it comes to taking any essential part in solving problems of transport.

"There is an interesting figure I should like to leave with you, which gives evidence of excellent railroad management and the loyalty of railroad workers. In 1917—the first year of American participation in World War I—the traffic units carried by each employee per hour of work were 94.3. In the first eight months of 1943 these traffic units per employee hour rose to 256.8 or 287 per cent, although there is little difference between the traffic units per dollar of compensation in 1917 as compared with 1943. I believe this shows that railroad management and men have at least kept in step with one another. It serves also to demonstrate that both sides have been fair with each other, even though in reaching the point of fairness we have been through some pretty tough negotiations.

## Favors Private Operation "Unreservedly"

"This achievement, during the most critical period in American history, has been brought about through the private ownership and management of the railroad industry. Needless to say, I am unreservedly for that system. It is my feeling that our persistent effort to increase our wage rates and improve our working conditions under this system stands the most satisfactory test of the soundness of free enterprise. Surely, it represents an incentive for our managers to find methods of operation which would increase economy and efficiency.

"We have felt the impact of technological changes in the reduction of railroad employment and in the increase of traffic units per employee. The rectitude of the principles of free enterprise is inevitably found in incentives. We have gone a long distance in the labor movement in improving our conditions because we have had the incentive of an expanding standard of living. This requires a dynamic society and not one that is static or retrogressive.

"I cannot serve my members adequately and honestly unless they have this incentive—the opportunity to expand their standard of living. This must respond to the individual responsibility of each of our members,—to amply care for his family. I must reflect their combined points of view and, in this regard, I aim to be most earnest. Each individual member of my organization should himself preserve or have preserved for him by his leaders in every possible way his individual rights and interests in his social and economic livelihood. My conception of the obligation I owe to the organization which I represent is that we have no right to exist unless that representation aims constantly toward the betterment of our family living conditions and the conditions under which we work. Every one in this room should have, and I am sure they want, the same right and interest in his own affairs.

"I am opposed to any fundamental division of the American citizenry into separate classes. I don't know how many, but I should judge that the vast majority of the 14,000 officials of the American railroads came up from the ranks. I had the right to select my course, which eventually placed me at the head of my brotherhood, just the same as Colonel Williamson had the right to advance out of the ranks into the chief executive office of the New York Central lines. I prize that right with everything that is in me. I intend to fight for that right to be given to each 116,000 members of my organization if they so determine. This



is the American system and, so far as I am concerned, I shall use every effort and opportunity to see that that right prevails."

Citing the examples of Presidents Willard of the B. & O., Clement of the Pennsylvania, Brown of the Lehigh Valley, and Jeffers of the Union Pacific who rose from the ranks to the top of their companies, Mr. Robertson expressed his concern lest such opportunities for advancement be curtailed in future. He continued:

"Disillusioning experience of the recent past in our relation to increasing bureaucracy at Washington have convinced me that many of us perhaps should change the shop-worn expression of 'coupon clippers' to that of 'opportunity clippers' as applied to some of those who apparently command the government trends in our Capital City. I see this more clearly today than ever before. We must change the drift toward the very things against which we are fighting this horrible war. We must and will be victorious against the Axis, but possibly the greater fight we will have ahead is against a drift toward an absolute or totalitarian state in America. We must break up this drift or our fighting abroad will be of no avail.

"While I would favor the greatest possible co-operation between the nations of the world in assisting each of them to help itself, I am primarily desirous of further substantiating and increasing and widening the American standard of living. We are all feeling the impact of taxation and government finance requirements. We will continue freely to sacrifice in every possible way to win a complete victory in this great war. However, a time will come when a halt must be called to prodigious and unwise spending of taxpayers' and workman's earnings which will increase the power and expense of bureaucracy and destroy American living standards. Otherwise, I cannot see where my members, at least, will be able to take home to their families adequate pay envelopes to maintain proper home conditions.

"A few months ago, in an address at Cincinnati, I described data which was the result of lengthy research, supporting papers of which are in my possession. I stated then that the United States had 6 per cent of the world's population and 36 per cent of the world's income. By dividing population into income, six units of average per capita income measured the American standard of living. On the other hand, the average per capita income of all the peoples of the world, outside of the United States, gave each individual two thirds of a unit of income. If the operation of post-war planning syphons away American income to such a degree as to increase the average standard for the rest of the world at the expense of substantially reducing our average of six units, then I say we will bring ruin upon ourselves; we will then be incapacitated to maintain any lasting constructive influence on the rest of the world.

### U. S. Can't Afford to Support the World

"We must not utilize devices put into effect for winning the war, such as rationing, the draft, government international management of money and credit, and relief and rehabilitation, which will only end in the insolvency of the American economy. American workingmen are watching their pay checks and today they find a substantial and growing difference between their rate of pay and what is taken home. We wonder if such government procedure will eventually give a rate of pay of \$60 a week to a man in the cab of a locomotive and permit him to take home only \$10 a week! It may for a time serve to increase 50 per cent the average per capita standard of living income of the world outside the United States from two thirds of a unit to 1 unit by such distribution of the American income, but in the final analysis it could bring about world economic and social collapse.

"I have observed recently the plan of the United Nations Relief and Rehabilitation, which as yet has not been approved by Congress, wherein many billions of American dollars are to be used to saturate the world. I think it is to the eventual benefit of the United States that we give aid and comfort to the distressed nations of the world following this war. However, the approach must be to promote and preserve the individual responsibility of the peoples of the world. There are plenty of sub-standard conditions in American living which need correction or improvement.

"I am for a plan which is based on an ever-growing economic

security, the greatest chance to secure employment that is productive and profitable; equal justice for all, an increasing standard of living and the highest obtainable freedom for the individual, consistent with our very great economic and social potentialities, and which can be maintained only under free enterprise and individual initiative."

Mr. Fletcher, in his advocacy of making emergency board awards binding on both parties while the war lasts, made it clear that he was uttering his own personal opinions and not those of a representative of the railroads. He said in part:

"For years, the press has teemed with references to the Railway Labor Act and its admirable machinery for settling controversies as to rates of pay and working conditions. Reference is made constantly to the fact that as a result of its beneficent operation, there has been no serious interruption of traffic as a result of strikes for nearly twenty-two years, the last serious difficulty of this nature being in 1922, when a nation-wide strike occurred among the mechanical forces on the roads. That strike resulted from dissatisfaction with the decision of the old Labor Board, created by the legislation of 1920.

### No Compulsion in Railway Labor Act

"That board, composed of representatives of the public, management and labor, passed out of existence in 1926, with the enactment of the Railway Labor Act, amended in important particulars in 1934. The 1920 Act proved satisfactory to neither labor nor management. Its conclusions were rejected by a large segment of labor, resulting in the shop strike of 1922. One of its decisions was sharply challenged in court by an important railroad, resulting in a Supreme Court decision in 1923, holding that the decisions of the board were not enforceable by legal process and that they had no force except as an appeal to public opinion. I may be justified in saying also that the public members, in whom resided the power of decision, were not always selected solely by reason of their demonstrated competency to pass upon the technical niceties that attend labor disputes.

"And so it came about that when the futility of this board had been amply demonstrated, the railroads and their employees, after protracted consideration and as a result of many conferences, agreed upon the provisions of the 1926 Railway Labor Act, and the agreed measure was promptly ratified by Congress. Over the protest of management, the Act was amended in important particulars in 1934.

"The theory of the Railway Labor Act is that there should be no provision for decisions that either party is legally bound to accept. It provides for conferences, mediation, arbitration and fact-finding. The law prohibits strikes or lock-outs until the procedures prescribed in the Act have been followed through. If negotiations on the properties fail, as they nearly always do, the Mediation Board steps in and endeavors to compose the differences by friendly negotiation. In no major dispute in recent years have these mediating efforts been successful. When the futility of further mediation efforts becomes apparent, it is the duty of the Mediation Board to endeavor to bring about an agreement to arbitrate by a board of three or six, composed of neutral and partisan arbitrators. Neither party is obliged to agree to arbitration, but if there is an agreement to arbitrate, the decision of such a board is binding upon both parties to the dispute.

"It is interesting to note that in every nationwide labor dispute that has arisen in recent years, management has invariably agreed to arbitrate and labor has just as consistently refused. It is my understanding that this attitude on the part of labor is due to the fact that it is the settled policy of the unions to agree to no type of procedure that will prevent it from exercising its 'economic power,' which is an euphonious reference to the privilege of striking. If arbitration is not accepted by the parties and the Mediation Board, looking at the picture as a whole, believes there is danger of an interruption of traffic, the President is notified and he appoints an Emergency Board, charged with the duty of ascertaining the facts and making recommendations to the President as to the right of the matters in controversy.

"This is the board which has always functioned in the case of major labor disputes arising since the passage of the Railway

Labor Act. As I have pointed out, the conclusions of this board are not binding upon the parties. As a matter of fact, the conclusions have not always been accepted. In 1938, the carriers proposed a reduction in rates of pay which the Emergency Board disapproved; the carriers acquiesced. But in 1941, when an Emergency Board recommended increases which were unsatisfactory to the employees and a strike was called by the leaders of labor to enforce their demands, the strike was averted only as a result of an agreement by management to pay more than the Emergency Board thought justified, which agreement grew out of the mediatorial efforts of the President of the United States and the members of the Emergency Board functioning as mediators.

### Vinson Prevented Peaceful Settlement

"In the latest dispute, coming to a climax late in 1943, the award of the Emergency Board as to the wages of the non-operating brotherhoods was, after some delay, accepted by both men and management, only to be rejected by the Director of Economic Stabilization as being, in his opinion, not in accord with the standards of the Stabilization Act as interpreted by the War Labor Board. In the case of the operating unions, the award of the Emergency Board was rejected by the unions and accepted by the carriers. But in justice to the unions involved, it should be stated that this decision reflected the views of the Stabilization Director, rather than the independent views of the members of the Emergency Board. It is safe to say that the machinery of the Act would have been sufficient to settle the controversy amicably, if the Stabilization Director had not intervened.

"This is by no means to say that his action was necessarily unjustified. If the Stabilization Act called for his intervention, unquestionably it was his duty to act. Whether the Stabilization Act actually applied to railroads may be the subject of a lively lawyers' debate. To me it is clear that a recurrence of what lately happened should not be permitted and that it should be prevented at all costs, even if legislation is necessary.

"For a long time the legislative tendency has been to regard transportation, and particularly the railroads, as deserving of treatment other than that accorded to industry generally. Thus railroads have their separate systems of retirement and unemployment allowances; they compensate for injuries without reference to the ordinary Workmen's Compensation Acts; they have this special plan for disposing of labor controversies about which we have been talking.

### Board Awards Should Be Binding

"But if the railroads are to be governed in the matter of wage disputes solely by the procedure of the Railway Labor Act, at least for the war's duration, the judgments of the fact finding board should be final, conclusive and binding on all the parties. As the law stands now, either party is privileged to ignore the judgments of the Emergency Board. Without raising any question as to the fairness and adequacy of such an arrangement in normal times, and realizing the force of objections to any law that arbitrarily controls either individual or collective action, it seems to me that in time of war, when sacrifice is the watchword of the nation, the legislative body may well provide that the decisions of the arbitral body shall have the force of compulsion.

"Nor do I believe that the nation's policy of stabilization in the interest of avoiding inflation would be grievously wounded by leaving all matters at issue to the judgment of a board organized under the Railway Labor Act. If competent and patriotic men are selected to make the decisions, it cannot be assumed that they will disregard the interests of the nation in this very important matter of price control.

"If it be thought that such authority is inconsistent with the general theory as to the function of a Presidential Emergency Board, consideration might be given to making arbitration compulsory, with the Stabilization Office represented as an additional arbitrator. In this connection, all who are interested in the question may profit by reading the unanimous opinion of the Supreme Court of the United States in the Toledo, Peoria & Western case, in which the court, only ten days ago, refused to allow a court of equity to enjoin acts of violence by striking employees, solely on the ground that the railroad had refused to arbitrate."

### Unilateral Compulsory Arbitration

This week the Supreme Court handed down a decision which must attract increasing attention with the passage of time. In that decision the Court carried still farther the doctrine of a special legal license for unions to commit violence which it laid down in the case of the teamsters' union in March of 1942. . . .

The [T. P. & W.] railroad applied to the District Court for an injunction to restrain strikers from interfering by violence with its property and interstate operations. The Supreme Court now holds that the railroad was not entitled to such an injunction. This, in effect, is to sanction whatever violence takes place that an injunction could stop. . . .

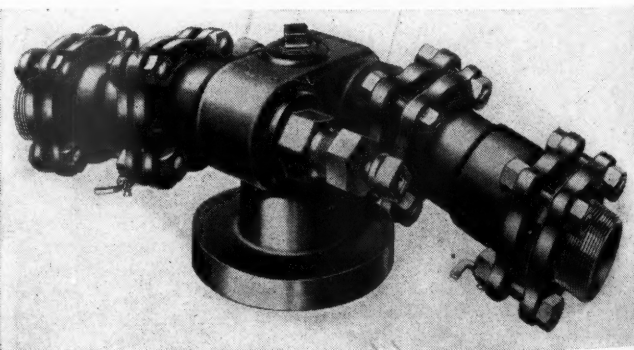
Is not the practical effect of this decision . . . to impose unilateral compulsory arbitration upon the railroads, while the unions remain free to accept or reject arbitration as they please? For if a railroad refuses the "voluntary" arbitration under the Railway Labor Act, the Supreme Court says in effect that the strikers may thereupon proceed with destruction of property, sabotage and violence without the restraint of any injunctive protection for the road.

—From the New York Times

### Boiler Check and Stop Valve

THE Okadee Company, Chicago, has recently added a double boiler check and stop valve to its line of locomotive specialties, incorporating new design and type of construction. One innovation is the use of a horizontal, in-line, plunger-type, spring-loaded check valve instead of the conventional vertical type. This construction gives a generally straight flow of feed water through the check valve portion to the stop valve from which it is delivered over a water spreader into the boiler below. This arrangement of the check valve offers minimum resistance to water flow and operates quietly without excessive valve pound.

The boiler check and stop valve is located on top of the boiler, a short distance back of the front flue sheet, one side of the dual valve receiving feedwater from the engineman's injector and the other from the feedwater pump. The check valve units have bronze bodies and plungers and stainless steel renewable seats. All connections employ ball-seat joints and steel companion flanges bolted together. Another new feature is that the stop valve body is made of cast steel with renewable monel seats, giving a strong and durable type of valve. The entire assembly is streamlined to match closely the contour of the boiler reducing the over-all height to a minimum.



Okadee Double Boiler Check and Stop Valve



# What Railroads Will Buy in 1944

**An analysis of the market outlook points to larger purchases of new locomotives, cars, materials and work equipment than in any year since the war began**

**T**HE railways have better prospects of obtaining new equipment, materials and supplies during 1944 than in any other year since the war began. These prospects have been enhanced by several important factors including: (1) The general easing of critical materials; (2) the assurance of greater allocations for locomotives, cars and new rail; (3) the restoration of the privilege of amortizing equipment and facility costs for tax purposes; (4) the large amount of money that has been reserved from net income; (5) a better general realization of the immediate need for equipment and material; (6) closer co-operation among the War Production Board, the Office of Defense Transportation and the Association of American Railroads; and, (7) new procedures designed to expedite the handling of applications for authority to carry out improvements.

## **Immediate Allocations Needed—Says Congress**

Although the railways still remain in the civilian claimant category, their accomplishments have made a deep impression on the minds of millions of citizens. The fundamental necessity for maintaining and even increasing the capacity of the rail carriers has won recognition not only from officers of our armed forces but from both branches of Congress. The long awaited report of the Truman committee, submitted to the Senate on last December 15, gave a sharp warning of the necessity of immediate action to provide equipment and materials necessary to maintain uninterrupted transportation.

In reviewing the immediate needs of the nation's transportation facilities, a House Naval Affairs subcommittee, on January 8, declared that two years of war strain on old equipment makes its replacement mandatory, especially on the West Coast. The shift to a stepped-up offensive in the Pacific, it said, cannot be made without adequate cross-country transportation. Continuing, the report said:

"One of the most shortsighted policies of the War Production Board has been its denial of raw materials to manufacturers for the production of rolling equipment and parts and accessories, without which trains, automobiles, trucks and other transportation vehicles cannot be operated.

"The candle has been burned at both ends—shortage of material for equipment at one end and tremendously increased use of equipment at the other. The nationwide condition of transportation facilities critically requires that raw materials be allocated immediately to manufacturers of transportation equipment, even though it may require withholding those war materials from the manufacturers of planes, tanks and armaments. Certainly the transportation system of this country is so vitally an integral part of our war machine that its proper maintenance contributes more to the final victory than will a few planes or tanks.

"Sight has been lost of the fact that men and materials of war have to be transported rapidly and safely. When the Office of Defense Transportation has specifi-

cally allocated transportation equipment, it is our sincere recommendation that efforts be made to provide the manufacturers of that equipment with sufficient raw material and high priorities to enable them to complete its manufacture in time to meet the emergency which justifies the allocation."

## **Railway Purchases in Peace and War**

Before the war railway purchases of equipment and materials usually exceeded net operating income (before taxes) by 5 to 10 per cent. For instance, in the thirteen year period 1929-1941 inclusive, annual purchases of equipment and materials averaged about \$689,000,000 or 8 per cent more than the average annual net operating income of \$638,000,000. Purchases during the last two years have been much less than net operating income by reason of the government restrictions on materials.

Expenditures for equipment and materials actually delivered by manufacturers in 1942 were about \$1,147,000,000, or about 23 per cent less than the net operating income of \$1,485,000,000. Again in 1943 purchases amounted to approximately \$1,137,000,000 or about 17½ per cent less than net operating income, which totalled \$1,380,000,000. Hence, government restrictions have probably been responsible for a curtailment of \$750,000,000 in railway purchasing during the last two years. The railways have been accumulating buying power which they may reasonably be expected to use in the future, in addition to the buying power that will be provided by future earnings.

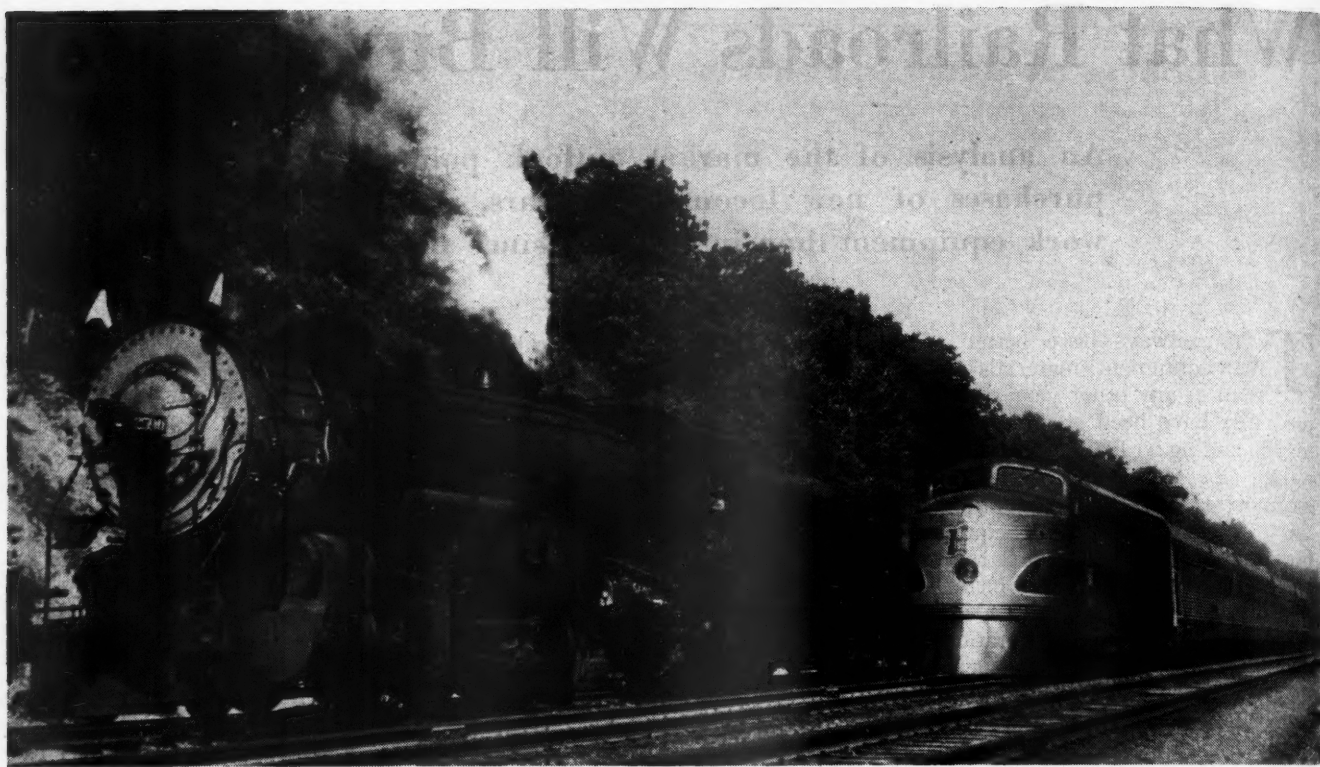
## **1,564,000 Tons of Steel for First Quarter**

Although carbon steel is still the controlling factor in production for both the war and home fronts, supplies to be made available during the first quarter of 1944 will be larger than for any comparable period in the past.

The transportation industry will receive a total allotment of 1,564,000 tons of carbon steel for the ODT program for the first quarter of 1944, or 12 per cent more than for the fourth quarter, and 27 per cent more than for the third quarter of 1943. The new allocation also includes requisite amounts of alloy steel, copper and aluminum for use with the carbon steel.

While the first quarter allocation of carbon steel is less than the amount originally proposed by ODT as the minimum requirement for domestic transportation, it appears to be the maximum quantity that can be utilized during that period by the equipment manufacturers and the rail mills, in view of the shortages of manpower and facilities. Furthermore, it represents the greatest amount of steel that has been granted to the ODT in any quarter since it assumed its duties as claimant agency for the railway industry early in 1943.

AA-1 priority rating has been assigned by the WPB to locomotives in an effort to speed the flow of raw materials to builders' plants, and the use of alloy steels



Maximum Transportation Output Is Possible Only Through Modern Equipment and Modern Roadway

for the building and maintenance of locomotives will be granted in instances where the railways request it. The ODT has declared that, after war requirements are met, the full capacity of builders' plants will be devoted during the first quarter to the building of domestic locomotives.

#### 50,000 New Freight Cars for '44

The apparent reluctance of the railways during the latter part of 1943 to take up all of the equipment allocated may be ascribed to two fundamental reasons: (1) uncertainty as to the continuation of amortization privileges and (2) the fact that "Victory" type freight cars are not adapted to efficient post-war use. Clarification of the first issue came with President Roosevelt's December 17 executive order transferring to the chairman of the WPB the authority to issue the required necessity certificates. In a recent interview, discussing the critical attitude of the railways toward modified types of equipment, Director Eastman cited WPB's recent decision approving the construction of all-steel freight cars in 1944 and declared that ODT expects that more alloy steel will be made available for railway equipment during the year.

A car-building program of 50,000 freight cars for 1944 was announced by the WPB in December, compared with 30,000 for last year. At least half of the 1944 cars will be of the new type all-steel construction, and these will completely predominate, provided that sufficient carbon steel is available and delivery schedules can be fully met. No other change in the cars is anticipated and the Transportation Equipment division of WPB will authorize the changes in design and allot necessary materials as soon as the designs and the bills of material for the "Victory" cars are completed. The use of steel for the maintenance of existing all-steel cars also has been approved by the WPB.

Another clear indication of the general easing of the

material situation is evident in the recent decision of the WPB authorizing the resumption of the production of copper-bearing steel.

Barring unforeseen military requirements, a minimum total 1944 allocation of 1,800,000 tons of new replacement rail has been promised the ODT by the WPB. Allocations are now being made on that basis with the understanding that any increase in tonnage production during 1944 can be allocated from time to time. The railways will receive 475,000 short tons of replacement rail, together with additional steel for accessories, during the first quarter. This represents an increase of nearly 19 per cent over the total for the last quarter of 1943.

The allocation of 1,800,000 net tons of steel for the entire year presents distinct advantages over the quarterly allocation system. In the past it has been the practice to cut quarterly allocations, with ensuing confusion in rolling mill schedules, as well as in later railway applications to the WPB. As a result, working schedules on the railways often were disrupted, particularly when the roads were fortunate enough to obtain sufficient manpower to lay the prospective rail. Under the new plan, more attention will be given to weather conditions in assigning rail. In order to provide for the more efficient utilization of manpower, more rail will be allocated to Southern roads during the first and fourth quarters while the Northern roads will receive their larger shipments during the second and third quarters of the year.

#### Streamlined Procedures Will Speed Action

The streamlining of procedures for handling railway applications now promises speedier results in obtaining necessary governmental authority. Heretofore all projects involving an expenditure of more than \$10,000 required the approval of the Facilities committee and review by the Facilities bureau of the WPB. Projects under \$10,000, requiring authority under Limitation Order L-41, were reviewed by the Facilities bureau be-



fore approval. These procedures involved considerable correspondence and frequent trips to Washington by railway officers. Under the new plan, the Facilities committee and the Facilities bureau have appointed a representative to sit with the staff of the Transportation Equipment division to pass on all projects requiring expenditures up to \$100,000, and such cases may be disposed of at one sitting.

Projects involving more than \$100,000 are still subject to review by the Facilities committee and the Facilities bureau, but the representative sits with the Transportation Equipment division and gathers whatever information is required by both groups, in order to allow them to review the case at the same time that the information is being obtained for analysis by the Transportation Equipment division. This action not only expedites actual processing, but it also results in the saving of considerable time for the railways and the WPB.

As another means of speeding actual construction and saving time, the WPB recently authorized the use of blanket applications in place of individual applications, for authority to undertake necessary incidental construction in bridge and building work covering a six-months period, where the total expenditures do not exceed \$10,000. Until recently, it was necessary to apply for material for all projects where the cost of new materials to be used exceeded \$500. Now minor projects can be carried out by using maintenance material to the extent of \$2,500. Up to \$2,500 of material also can be obtained under Order P-142 for larger projects.

### Modern Locomotives "Strut Their Stuff!"

Eighty per cent of all road locomotives were required to handle traffic in October, 1941, while September, 1943, saw 86 per cent of all the 28,834 road locomotives in service, with only 488 stored and 3,519 in the shops for general repairs or on the waiting list. During September, 1943, when the *average* freight locomotive was running 3,546 miles and the *average* passenger locomotive was rounding out 6,500 miles, the *modern* steam locomotive was covering twice those distances. Some *newer* steam locomotives were running 24,000 miles a month in passenger service, while Diesel locomotives were chalking up records of 32,000 miles a month in passenger service and 12,000 miles a month on freight runs.

More and more railway officers are realizing that it is the performance of *modern* locomotives as a group that is making such a large contribution to the over-all accomplishment of railway motive power. The outstanding job that is being done by this relatively small proportion of the total number of locomotives points to the need for replacing locomotives that are more than ten years old with modern and more efficient power.

The car shortages that have manifested themselves during the last year may be accounted for by several contributing factors, and the question has been raised as to whether such shortages may not reflect the shortage of motive power as well. There are some potential improvements in car usage that may better the situation, but motive power may well be a limiting factor. The addition of about 1,000 new locomotives in 1943 helped maintain a high traffic rate, but the real test apparently will be in the winter weeks just ahead when reduced train tonnages and other road and terminal problems will be aggravated by cold weather. This crucial period may well determine whether the capacity limit has been reached, for it is doubtful whether the percentage of active locomotives can be raised much beyond the 89 per cent level.

With more than 4,000 road locomotives now being

used in yard service, the installation of a substantial number of new switchers would release some of this power for road haul. Local power shortages are being relieved by some 300 leased locomotives now moving from one road to another, and a continued expansion of this cooperative plan by individual roads, the AAR and the ODT will help. However, in the absence of adequate deliveries of new locomotives, the burden of motive power supply has fallen on engine houses and back shops.

### One Way to Alleviate Manpower Shortage

Expenditures for the maintenance of equipment during the first ten months of 1943 were \$1,158,692,719—the highest for any similar period since 1923, and \$163,343,359, or more than 16 per cent, greater than in the like 1942 period. Coupled with the shortage of manpower, needed improvements in fire cleaning, ash handling and coaling equipment are particularly acute. Under present conditions it is even necessary to divert the services of skilled enginehouse men to the job of getting engines over the pits and into the enginehouses. Although a certain number of sorely-needed new shop tools have been made available, there are pronounced shortages of cylinder castings, pistons, valve rings, motion work rods, bushings and specialties. And in many instances the limited output by obsolete shop tools is making itself felt at a time when intense locomotive utilization is wearing out parts at a greatly accelerated rate.

Evidence that railway freight-moving equipment has entered the overload zone is the fact that persistent car shortages prevailed during a considerable part of 1943. A further indication of the strain on the car supply is the sharp reduction of surpluses of railway-owned cars. Surpluses for the seven weeks of last September and October were well below 20,000 and reached a low of 13,570 for the week ending October 23. In 1942, the lowest figure was 30,400 at the end of October and surpluses of less than 50,000 cars were reported for eight weeks during that fall.

Although I. C. C. reports show a net increase of 12,475 freight cars owned by Class I roads for the 12 months ending September 30, 1943, there were 21,833 fewer serviceable cars and 19,570 fewer cars on line than on September 30, 1942.

The outlook for 1944, according to Dr. J. H. Parmelee, director of the Bureau of Railway Economics, indicates further moderate increases in traffic demand, and considering the various factors, increases of from two to five per cent may be anticipated in the ton-mile demand on the railways. While such an increase would reflect a relatively small if any increase in the total carloads, there are two fundamental reasons which indicate a steady demand for freight-car supply. First, the continued reduction of oil loadings to the Atlantic seaboard, which passed their peak last summer, will not reduce the demand for either box or open-top cars, and second, the prospective increase in the relative volume of war traffic to the Pacific coast will in all probability increase the average haul.

### Passenger Cars to Be Built This Year

None of the railway facilities of this country has been subject to greater demand and greater utilization than railroad-owned passenger rolling stock and Pullman-owned sleeping and parlor cars. Little reserve remains for the anticipated increase of from 10 to 20 per cent in passenger-mile demand that has been predicted by Dr. Parmelee for 1944. The 1,200 troop sleeping cars now being delivered will help, but in a relatively small way;

there remains the need of a substantial increase in railway-owned passenger cars to meet the tremendous passenger movement.

The favorable outlook for the construction of passenger equipment during 1944 is indicated by the optimistic opinion of Director Joseph B. Eastman of the Office of Defense Transportation, who in a press conference on December 20, pointed to the possibility of the construction of some new passenger cars in 1944. From present indications, basic materials, including alloy steel and aluminum, will be rolled and allocated by the middle of July, hence no considerable number of new cars can be built and actually delivered before the last quarter of the year. Another hurdle is air-conditioning equipment, including electric motors, which apparently will not be available much before the fourth quarter, this delay being caused not so much by a shortage of copper or other material as by limited manpower in the manufacturers' plants. If necessary, the new passenger cars may even be built with provision for subsequent application of air-conditioning equipment.

The year 1943 was characterized by an intensification of the efforts of the railways to maintain their fixed properties in condition to carry the ever-increasing burden of war traffic, and construction activities were maintained at about the same rate that prevailed in 1942. While maintenance of way expenditures increased to record proportions, the condition of the tracks and structures showed further deterioration.

Expenditures for maintenance of way approximated \$1,070,000,000 in 1943—the greatest expenditure for this purpose in history—more than 34 per cent larger than in 1942 and 26 per cent greater than the annual average for the five year period 1925 to 1929 inclusive. Even after considering the swell in the 1943 figure occasioned by substantially larger charges for depreciation (as the result of an order issued by the I. C. C.), and an indeterminate sum representing charges for deferred maintenance, actual expenditures for maintenance of way came very close to the billion dollar mark, thus establishing a record, except for the abnormal year of 1920. Acting with the approval of the I. C. C., the roads in 1942 set aside a total of \$5,759,912 for work that is currently needed but which has been restricted because of the war, and it is estimated that the corresponding amount for 1943 will be somewhat larger.

Under ordinary circumstances an annual expenditure of \$1,000,000,000 would suffice to maintain the properties in satisfactory condition and with some money to spare for deferred maintenance or as a cushion against future emergencies. However, in 1943, there were several factors that reduced the effectiveness of maintenance expenditures including, (1) the generally higher cost of materials, (2) substantial pay increases at overtime rates, (3) the reduced efficiency of labor, (4) the greater loss of productive time due to increased traffic density, and (5) unbalanced maintenance programs arising from necessary efforts to make up deficiencies in some classes of work by expanding others.

### Rail and Crossties Are Critical Items

Rail is still the most critical item of all elements in the track structure and it is likely to continue so as long as the supply of new rail is not commensurate with the rate at which it is being worn out in track. C. H. Buford, vice-president, Association of American Railroads, in recent testimony before a Senate subcommittee, pointed out that the roads had obtained only 78 per cent of their minimum rail requirements in 1942 and only 73 per cent in 1943. In 1942 the roads requested a minimum

of 1,632,000 net tons of rail; they received 1,200,000 net tons. In 1943 they requested 2,100,000 net tons and were allotted 1,527,000 net tons. Hence, for the two-year period the roads are short one million tons of new rail that they estimated was necessary to meet minimum requirements.

That present rail allotments are running far short of actual needs, even when allowance is made for the increased life imparted by rail-end welding and hardening and other practices, is evidenced by the upsurge in the number of transverse fissures detected in track and the number of service failures. Furthermore, studies show conclusively that these figures closely parallel the increase that has occurred in traffic since the war began.

Crossties also are a cause for grave concern in 1944. Insertions in 1943 approximated 46,000,000, a reduction of 2,616,000 ties, or 5.4 per cent, compared with 1942 and 1,225,000 or about 2.6 per cent less than for 1941. Average annual renewals of 44,800,000 crossties for the 13-year period 1931-1943 inclusive amounted to only 59 per cent of the average for the six-year period ending with 1930. With due allowance for the more extensive use of treated ties and other means of prolonging tie life, it is doubtful that the tie condition in general has been restored to any appreciable extent.

### Will the Roads Buy More Work Equipment?

The substitution of power machines and tools for the labor that has not been available, has been largely responsible for the fact that the railways have been able to maintain tracks and structures to the standards necessary to handle the tremendous wartime traffic. Yet, despite the large purchases that were made as the roads emerged from the depression, the units of work equipment now in service have been inadequate to meet all of the needs that have arisen.

On this showing, the railways are obtaining from the War Production Board the required priority ratings for the equipment needed. The volume of purchases during 1943 exceeded that of any previous year in both number of units and the money expended. Last year the railways bought some 8,500 units of work equipment for maintenance of way, at a cost of more than \$12,300,000, bringing the total investment of all the railways in this equipment to \$120,000,000. Annual expenditures and the total number of units of work equipment purchased for maintenance of way purposes during the last few years are as follows:

Acquisitions of Work Equipment

Year	No. of Units	Total Expenditure
1939	3,548	\$6,000,000
1940	5,414	7,250,000
1941	8,007	10,500,000
1942	7,612	10,270,000
1943	8,507	12,300,000

The railways are planning to buy mechanized equipment in still greater quantities during 1944.

A recent survey comprising reports from 455 railways, including all but one of the Class I roads, shows that most railway officers expect still greater shortages of labor in the months ahead, and while not all had completed their budgets for 1944 (at the time of the survey) enough had done so to show that the roads as a whole plan to buy more work equipment this year than during the record year 1943.

At the beginning of 1943, maintenance of way officers were faced with an acute labor shortage which grew worse as the working season progressed, except in June when a slight gain resulted from the employment of high



school boys and the importation of Mexican labor. Despite the many expedients employed, the downward trend in labor continues and the many difficulties are accentuated by the comparative inefficiency and lack of experience of the new personnel.

Confronted with these conditions, maintenance officers have no alternative—they must rely on the further mechanization of their operations to offset the manpower shortage. While they already possess a large complement of work equipment acquired in recent years, no road has enough to meet all its needs even under ordinary conditions, and many are woefully short of the number of units that they should have. Purchases in 1944 undoubtedly will follow much the same pattern as last year and the demand will be for types of work equipment that can be substituted in largest measure for hand labor and for operations that cannot be carried on manually. Details of the purchases of work equipment are shown in an accompanying table.

One of the most important results of maintenance operations during the last two years has been the convincing proof of the efficiency of work equipment. For years the belief had persisted in some quarters that the value of such equipment was greatly exaggerated. Some officers were reluctant to invest in any except certain types designed to handle work that could not be performed by hand, while other roads in low-wage territories could see no advantage in mechanization. Today conditions have changed so completely that no evidence of this former reluctance remains.

### What Prospects for Signaling?

Much of the credit for the success of the allied armies on their many fronts has been given to the superb performance of their modern signal corps. So in the battle of transportation on the home front, modern signaling and communication systems must be credited in large measure with the successful handling of the heaviest traffic in the history of the railroads. Modern signaling has increased the train handling capacity of existing tracks, and increased the overall average speed of trains by reducing train time between terminals, by minimizing the number and duration of train stops.

However, unlike the signal corps of our armies, that have been provided with every modern scientific device and in quantities to meet almost every need, railway signaling and communication systems have been subject to many severe restrictions throughout the entire period since Pearl Harbor. The railways of this country entered the war with 97,361 track-miles of automatic block

signaling, 4,487 interlockings, and 2,702 track-miles of centralized traffic control, while 42 of the most important freight classification yards were equipped with power switches and car retarders. As a result of WPB restrictions, the only sizable new automatic block signaling projects placed in service in 1943 were 37.5 miles of single track on the Wabash, in a territory where a serious train accident occurred some time previously, and several short sections on the Pennsylvania. In sharp contrast was the 250 miles of automatic block signaling installed by the Canadian Pacific in the province of Ontario, and so arranged that C. T. C. can be added in the near future with minimum changes.

### How C. T. C. Speeds War Traffic

Installations of C. T. C., on the other hand, showed a sharp increase when 1,177 track-miles were built in 1943 as against 807 miles in 1942—for the reason that C. T. C. requires comparatively small quantities of critical materials. In 1943 a total of 2,313 operative signal units and interlocked switches were installed, compared with 1,417 units in 1942 and 1,291 units in 1941. However, many of these installations were carryovers from projects planned and underway prior to our entry into the war.

One of the most outstanding examples of the increased efficiency to be derived from the wartime installation of C. T. C. comprises 171 miles of single track between Las Vegas, Nev., and Yermo, Cal., on the Union Pacific. By June, 1942, the traffic volume on this sub-division had spurted to 50 per cent beyond normal; during the last half of 1942 traffic congestion was so acute that dispatchers could not issue their orders fast enough to keep trains moving; freight trains clogged the passing tracks to such an extent that practically all train crews exceeded the overtime limit of 13 hr. 41 min., and double crewing was required to prevent violations of the 16-hour law. Hours were lost by helper locomotives waiting to return to the foot of grades, and road locomotives were in service for such long periods that a critical power shortage resulted.

Now, look at the record since the installation of C. T. C. was completed on June 10, 1943! Seven helper locomotives are now doing the same work that formerly required 14. Freight trains now usually complete the 171-mile run in either direction in less than 10 hours, compared with 13 to 16 hours required before the installation. C. T. C. made it possible to handle approximately 95 per cent more loaded cars westbound, and 130 per cent more empties eastbound during a seven-day period in June, 1943, than during a similar period in the same month of 1942; and the average time of all freight cars on the sub-division has been reduced by approximately three hours. Most important of all, traffic is kept moving, congestion and critical delays have been eliminated.

With the general easing of critical materials and the broader realization of the vital need for utilizing every means at hand to enable the railways to meet the greater traffic demands that lie ahead, the general outlook for increased activity in the railway signaling field is good. Due to what has transpired in the field during the last two years, the conclusion is that signaling construction will be confined largely to C. T. C. projects on single track lines, with crossing protection, interlockings and car retarders tagging along and awaiting the more favorable post-war period. Even without the benefit of any easing of WPB restrictions, the principal activity during 1944 will comprise the installation of some 800 track-miles of C. T. C.

Units of M. of W. Work Equipment Purchased in 1942-1943

	1943	1942
Air Compressors (individual, power units) .....	115	73
Concrete Mixers .....	56	..
Cranes (Locomotive, Rail-laying, truck and tractor-mounted—up to 10 tons) .....	70	73
Generators (individual power units) .....	46	50
Grading and Trenching Equipment .....	165	152
Hoists, Power .....	25	..
Lubricators, Rail and Flange (Track Type) .....	660	545
Motor Cars .....	3,239	2,639
Motor Car Engines .....	133	130
Motor Car Trailers and Push Cars .....	1,130	1,069
Motor Vehicles (Trucks and Automobiles) .....	273	239
Paint Spray Outfits .....	13	31
Pumps, Portable .....	68	..
Rail-Laying Equipment .....	513	420
Rail Saws .....	80	..
Snow Plows, Rail-Car Type .....	5	..
Snow Plows, Tractor Mounted .....	13	..
Tie Tamping Outfits .....	504	344
Tie Tampers, Unit Type .....	284	593
Track Surfacing Equipment .....	40	..
Weed Destroying Machines .....	137	263
Welding Outfits .....	40	29
Other Miscellaneous Units .....	898	962
Total .....	8,507	7,612

# Mexican Laborers Made Welcome on N. Y. Central

ABOUT 1,650 Mexican track laborers are now employed by the New York Central System at 27 camps throughout Ohio, Michigan, Indiana, New York and Massachusetts. They are here under 6 months' contract, working arrangements having been effected between the War Manpower Commission and the Mexican government. The first group of 750 reached New York, August 18; there were 600 more who came



on December 12; and on January 2, coaches arrived from El Paso, Tex., bearing another 300.

Rate of pay is the same as for American labor, but 10 per cent of each man's wage is withheld and deposited in Mexico City, as a proviso against his becoming a possible charge upon the Mexican government at the expiration of his contract in the States.

The original group of Mexican volunteers attracted four former University of Mexico graduates, a few who had been with the police and fire departments, one chemist and four school teachers. There is a camp clerk, in upstate New York, whose father was Mexican consul to France at the time of its capitulation to the Germans. Laborers must be over 21, and the railroad prefers them about 30. All have passed rigid physical tests. A number of the men are evacuees from the Paricutin volcanic area. Many are farmers.

All of these Mexican laborers are good workers, reports Harry L. Buhler, general supervisor of the New York Central's labor camps. "Our maintenance-of-way men," he reports, "are all very well satisfied with them."

At Utica and Syracuse, N. Y., the railroad has put up two big camps, at a total cost of \$50,000. Observed Mr. Buhler, these camps possess the latest type facilities, and are easily comparable to U. S. Army barracks. A further expenditure of about \$10,000 has just been authorized for

the construction of recreation halls at both places.

Since 98 per cent of these Mexicans are of the Catholic faith, an effort is being made by the Catholic Dioceses of New York to assign them visiting priests. At one point, the men refused to start work until they had gone first to church.

Essential in keeping the men satisfied in their novel location is the provision of Mexican-style food. Certain of the trackmen like the novelty of American cooking, but more of them prefer their native diet. The railroad is now endeavoring to outfit each camp with a Mexican cook. So attractive is the pay and the train ride to some of the volunteers that the railroad has

enjoyed differing results in the efficiency of its cooks. One applicant in Mexico City assured the authorities he was a first-class cook. After his five-day journey, at the expense of the railroad, he set about preparing his first meal. Attempting to stretch 3 lb. of beans to feed 85 men, it was soon evident his culinary talents were limited.

Entertainment is not the least consideration, and the railroad endeavors to bring Mexican and Spanish movies to the camps. This is not always possible, and where American films were being shown some distance from a camp, the railroad hired buses and transported the men several miles to the nearest theater. This was entirely at the railroad's expense.

The New York Central has entered subscriptions for Mexican newspapers and periodicals, and has issued a special number of its magazine, "The Headlight," printed in Spanish. Copies will be given the men for mailing home, and it is hoped these may serve to draw further job applicants.

In Natick, Mass., where one camp is located, even the townspeople have extended a gesture of friendliness and welcome. At Christmas, they gave the Mexican laborers a party, and 56 presents, one for each man. Mostly, there are about 50 men to a camp, though they vary anywhere from 40 to 100. Camps are distributed over the New York Central in this manner—In Ohio: Conneaut, Ashtabula, Unionville, Painesville, Mentor, Huron, Elyria Junction, Marion, Crestline; in Michigan: Francisco and Ypsilanti; in Indiana: South Bend; in Massachusetts, Natick; and in New York State: Stuvessant, Utica, Rome, East Syracuse, Buffalo, Lackawanna, Churchville, Palmyra and Yosts. Thus far the Mexicans have been employed for track work only by the Central, but Mr. Buhler revealed that permanent camp buildings are now being constructed at Weehawken, N. J., and East Buffalo, N. Y., at a cost of \$43,000 apiece. At these two points, the men are to be employed in the freight houses.

## Spanish Edition of "Headlight"

**CENTRAL HEADLIGHT**

**MEXICANOS PATRIOTAS COOPERAN EN EL ESFUERZO BELICO DE LOS FERROCARRILES DEL NEW YORK CENTRAL**

**F. R. Williamson, Presidente, Extiende una Cordial Bienvenida a los Trabajadores Mexicanos**

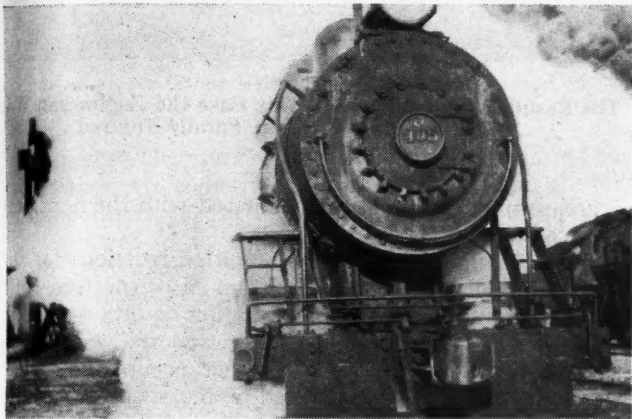
**Señor Ricardo G. Hill, Comandante General, Extiende Bienvenida**

**La Historia del N. Y. Central**



# Locomotive Casualties and Defects Continue to Increase

Bureau of Locomotive Inspection annual report shows the effect of high utilization rate of locomotives and need for continuing campaign against low water



Here Is a Locomotive That Was Ordered from Service Because of Steam Leaks That Obscured the View of the Engineman

ANOTHER year of wartime operation of motive power at extremely high rates of utilization has had a profound effect on the condition of locomotives as evidenced by the report of the I. C. C. Bureau of Locomotive Inspection for the year ended June 30, 1943, which has just been released by John M. Hall, director. There was a slight increase in the number of locomotives for which reports were filed, from 42,951 to 43,064 and an increase of 3,196 in the total number inspected. The number found defective increased by 931 but the great increase was in the number of defects found; there were 6,602 more than in the previous year.

The total number of accidents as a result of the failure of the boiler or some locomotive parts or appurtenances increased and while the number of persons killed showed a slight decrease the number injured increased greatly.

In addition to the tabular data included here, other tables in the report show a detailed study of locomotive defects by type of failure and by individual railroads. The report also included summaries of the various accidents arranged chronologically, by roads. An abstract of the report follows.

## Explosions and Other Boiler Accidents

Twenty-five boiler explosions occurred in the fiscal year, in which 24 persons were killed and 56 injured. There was an increase of 12 accidents, an increase of one person killed, and an increase of 36 persons injured from explosions as compared with the preceding year.

One of these accidents, in which two persons were

Table I.—Reports and Inspections—Steam Locomotives  
Year ended June 30

	1943	1942	1941	1940	1939	1938
Number of locomotive for which reports were filed	43,064	42,951	43,236	44,274	45,965	47,397
Number inspected	116,647	113,451	105,675	102,164	105,606	105,186
Number found defective	11,901	10,970	9,570	8,565	9,099	11,050
Percentage inspected found defective	10	10	9	8	9	11
Number ordered out of service	487	474	560	487	468	679
Number of defects found	51,350	44,928	37,691	32,677	33,490	42,214

Table II.—Reports and Inspections—Locomotives Other Than Steam  
Year ended June 30—

	1943	1942	1941	1940	1939	1938
Number of locomotive units for which reports were filed	4,351	3,957	3,389	2,987	2,716	2,555
Number inspected	6,847	6,728	5,558	4,974	4,581	4,024
Number found defective	298	358	319	298	260	274
Percentage inspected found defective	4.4	5	6	6	6	7
Number ordered out of service	6	12	21	16	14	9
Total number of defects found	849	928	905	766	696	769

Table III.—Accidents and Casualties Caused by Failure of Some Part of the Steam Locomotive, Including Boiler, or Tender  
Year ended June 30—

	1943	1942	1941	1940	1939	1938
Number of accidents	319	222	153	164	152	208
Percent increase or decrease from previous year	43.7	145.1	6.7	17.9	26.9	20.9
Number of persons killed	27	34	15	18	15	7
Percent increase or decrease from previous year	20.6	126.7	16.7	20.0	114.3	72.0
Number of persons injured	373	227	182	225	164	216
Percent increase or decrease from previous year	64.3	24.7	19.1	37.2	24.1	23.7

<sup>1</sup> Increase.

Table IV.—Accidents and Casualties Caused by Failure of Some Part or Appurtenance of Locomotives Other Than Steam  
Year ended June 30—

	1943	1942	1941	1940	1939
Number of accidents	15	9	11	7	5
Number of persons killed	18	9	11	7	5
Number of persons injured	18	9	11	7	5

Table V.—Accidents and Casualties Caused by Failure of Some Part or Appurtenance of the Steam Locomotive Boiler <sup>1</sup>  
Year ended June 30—

	1943	1942	1941	1940	1939	1938	1915	1912
Number of accidents	129	81	43	67	52	59	424	856
Number of persons killed	25	30	12	16	15	5	13	91
Number of persons injured	173	83	64	110	55	59	467	1,005

<sup>1</sup> The original act applied only to the locomotive boiler.

killed and 22 injured, was primarily caused by a collision in which the locomotive was derailed and came to rest leaning to the right and with the front end down an embankment. This position caused parts of the firebox to be bared of water which resulted in overheating. The explosion occurred about 10 minutes following the derailment after the engineer, who had previously alighted on the ground, had returned to the locomotive in an apparent attempt to take steps to prevent the overheating of the exposed areas of the firebox.

In one instance, in which two persons were killed and one injured, parts of all the firebox sheets were overheated due to foaming of the boiler water.

In another accident, in which one person was injured, the explosion was caused by the failure of a fusion welded joint in a crown sheet patch.

The remaining 22 accidents, in which 20 persons were killed and 32 injured, were caused by overheated crown sheets due to low water.

The serious results of boiler explosions are well known to railroad men and explosions have been materially reduced since the inception of the Boiler Inspection Act; however, there has been an increase in such accidents in the past three years with consequent increased loss of life and injuries and destruction of equipment. Increased vigilance of all concerned is necessary to overcome and reverse this trend.

Many locomotives are equipped with protective devices such as syphons, multiple drop or fusible plugs, and low-water alarms, all of which have no doubt prevented boiler explosions or minimized the severity thereof.

Carriers that are continuing to make applications of devices of this character are making a distinct contribution to the conservation of human resources and equipment.

Boiler and appurtenance accidents other than explosions resulted in the death of one person and injuries to 117 persons; this is a decrease of 6 deaths and an increase of 52 injuries as compared with the preceding year.

### Extension of Time for Removal of Flues

One thousand and sixty-seven applications were filed for extensions of time for removal of flues, as provided in Rule 10. Investigations disclosed that in 49 of these cases the condition of the locomotives was such that extensions could not properly be granted. Eighteen were in such condition that the full extensions requested could not be authorized, but extensions for shorter periods of time were allowed. Forty-eight extensions were granted after defects disclosed by investigations were required to be repaired. Twenty-five applications were canceled for various reasons. Nine hundred and twenty-seven applications were granted for the full period requested.

There was an increase of six in the number of accidents occurring in connection with locomotives other than steam and an increase of nine in the number of persons injured as compared with the preceding year. No deaths occurred in either year.

During the year, 4.4 per cent of the locomotives inspected were found with defects or errors in inspection that should have been corrected before the locomotives were put into use; this represents a decrease of 0.6 per cent compared with the results obtained in the preceding year. Six locomotives were ordered withheld from service because of the presence of defects that rendered the locomotives immediately unsafe; this represents a



The Result of Low Water—In This Case the Engineman Was Killed and the Fireman Fatally Injured

decrease of six locomotives compared with the next preceding year.

Under Rule 54 of the Rules and Instructions for Inspection and Testing of Steam Locomotives, 501 specification cards and 6,273 alteration reports were filed, checked, and analyzed. These reports are necessary in order to determine whether or not the boilers represented were so constructed or repaired as to render safe and proper service and whether the stresses were within the allowed limits. Corrective measures were taken with respect to numerous discrepancies found.

Under Rules 328 and 329 of the Rules and Instructions for Inspection and Testing of Locomotives Other Than Steam, 432 specifications and 110 alteration reports were filed for locomotive units and 69 specifications and 97 alteration reports were filed for boilers mounted on locomotives other than steam. These were checked and analyzed and corrective measures taken with respect to discrepancies found.

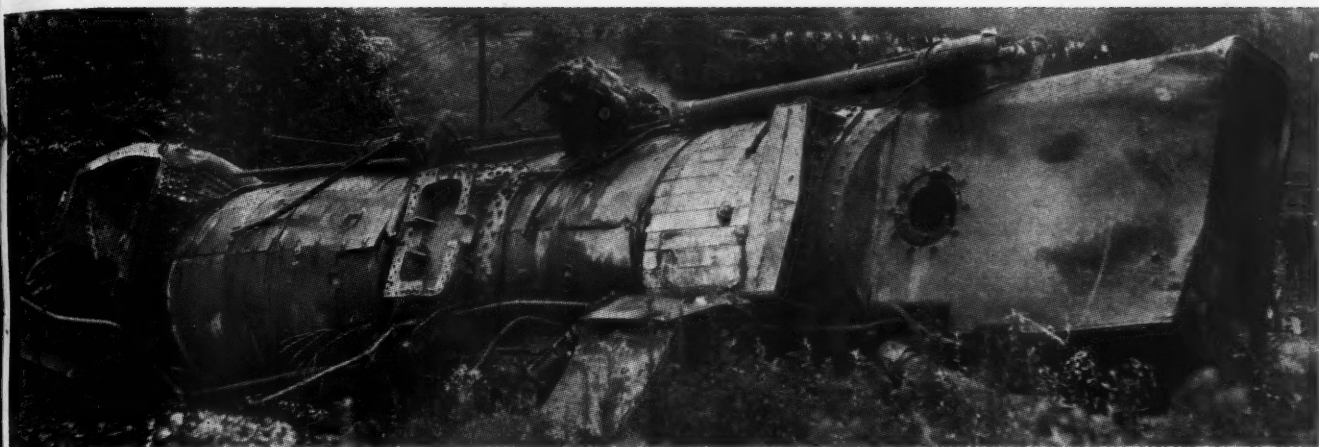
In response to requests from military and naval authorities and other Government agencies engaged in the war effort, inspections of various locomotives were made to determine the condition and suitability for use, and cooperative assistance was rendered in other respects. These locomotives are being generally maintained to the standards prescribed by the locomotive inspection law and rules governing the condition of locomotives used on the lines of common carriers and inspections are currently made by our inspectors.

No formal appeal by any carrier was taken from the decisions of any inspector during the year.

### Accident Prevention

The condition of locomotives in use at the beginning of the upturn in railroad traffic was as good as ever recorded which in turn resulted in the highest degree of safety of locomotive operation ever attained. Increasing traffic required the placing in use of a large number of old and practically obsolete locomotives which had been in dead storage for periods ranging up to 10 years or more. These locomotives were repaired and placed in reasonably serviceable condition for the character of service for which they were designed but, lacking many modern features, they were not capable of rendering the performance found necessary under present circumstances without unusual precautions being exercised in inspections and the application of repairs to





Boiler Explosion in This Case Resulted from a Derailment Which Exposed the Crown Sheet; the Engineman and One Non-employee Were Killed and One Employee and 21 Non-employees Were Injured as a Result of This Accident

various parts much more frequently than is required for more modern locomotives. This condition and the increasing intensive use of all locomotives, coupled with the shortages of manpower and suitable material with which to make prompt and substantial repairs, has resulted in wear taking place faster than it can be restored and in turn often results in neglect to repair what may appear at the time to be an insignificant defect to an unimportant part, the failure of which, however, may start a chain of events leading up to delay in traffic and loss of life or limb.

Increase of manpower employed on locomotive maintenance will not within itself be of much assistance in solving the maintenance problem unless a reasonable proportion of this increase is skilled in the various crafts involved and sufficiently experienced to be able to exercise good judgment; in other words, there is a practical

limit to which skilled labor can be diluted if benefit from the efforts exerted is to be obtained.

Inability to obtain a sufficient number of new locomotives and scarcity of suitable material and new parts with which to make substantial repairs to existing locomotives results in attempts to get the last possible mile out of all parts in which wear or deterioration has developed. This condition contributes to increase in breakdowns, delays, and accidents and has the further effect of diverting skilled labor to reclamation of used parts that would otherwise be discarded and replaced with new parts which would remain in serviceable condition longer, and which in many instances would cost less in manhours for preparation and application.

It is apparent that the supply of new locomotives for domestic railroads will not be sufficient to fill the current and prospective needs, and in view of this it is of

Table VI.—Number of Casualties Classified According to Occupation—Steam Locomotive Accidents

	Year ended June 30—									
	Killed		Injured		Killed		Injured		Killed	
	1943		1942		1941		1940		1939	
Members of train crews:										
Engineers .....	11	109	10	79	5	41	5	70	4	46
Firemen .....	10	143	12	73	5	68	6	49	6	66
Brakemen .....	4	47	4	32	3	21	4	24	2	18
Conductors .....	..	8	..	7	..	8	1	4	..	5
Switchmen .....	..	12	..	5	..	6	..	4	..	6
Roundhouse and shop employees:										
Boilermakers .....	..	4	2	4	..	..	1	3	1	1
Machinists .....	..	3	..	5	1	3	..	3	..	2
Foremen .....	..	..	..	1	..	2	..	..	..	..
Inspectors .....	..	..	1	2	..	..	..	..	..	..
Watchmen .....	1	3	..	..	1	2	..	1	..	1
Boiler washers .....	..	..	..	..	..	..	..	..	..	..
Hostlers .....	..	..	..	4	..	3	..	2	..	1
Other roundhouse and shop employees .....	..	4	3	3	..	1	..	1	..	2
Other employees .....	..	11	2	3	..	9	1	20	..	2
Nonemployees .....	1	28	..	9	..	18	..	44	2	14
Total .....	27	373	34	227	15	182	18	225	15	164

Table VII.—Number of Casualties Classified According to Occupation—Locomotives Other Than Steam

	Year ended June 30—									
	Killed		Injured		Killed		Injured		Killed	
	1943		1942		1941		1940		1939	
Members of train crews:										
Engineers .....	..	3	..	5	..	1	..	2	..	3
Firemen .....	..	9	..	2	..	5	..	2	..	1
Brakemen .....	..	1	..	1	..	1	..	..	..	1
Conductors .....	..	1	..	..	..	1	..	1	..	..
Switchmen .....	..	1	..	1	..	..	..	1	..	..
Maintenance employees .....	..	2	..	..	..	2	..	1	..	..
Other employees .....	..	1	..	..	..	..	..	..	..	..
Nonemployees .....	..	..	..	..	..	1	..	..	..	..
Total .....	..	18	..	9	..	11	..	7	..	5

paramount importance in the continued functioning of the railroads, in the expeditious production of new locomotives that can be wholly depended upon to perform their intended service, and in the interest of safety, that changes in design of the component parts thereof, materials, construction methods, processes, and established practices of the builders and the railroads be held to a minimum until the cessation of the war.

The exigencies of railroad service are such that all employees responsible for train movement are under constant pressure, some of which is self-imposed because of the nature of their training, to avoid train delays with consequent disruption in the orderly flow of traffic. It is inherent in the nature of the service that the motive is always present to keep trains moving not only to pre-

vent train delays but also to avoid possible criticism or discipline for failure to do so. This condition is accentuated under present conditions because all involved realize that speed is the essence of today's production and delivery. As a consequence trains are at times kept moving until a major failure occurs instead of stopping and investigating any untoward indications which may momentarily appear to be of secondary importance. No considerable number of accidents of this character occur on any one railroad; however, considering the railroads as a whole, they are not uncommon. Many of these accidents would undoubtedly be avoided if the urge to keep trains moving was not temporarily permitted to take precedence over the usually recognized fact that undue haste often makes great waste.

## Communication . . .

### What Are "Lightweight" and "Semi-Lightweight" Cars?

TO THE EDITOR:

NEW YORK

Under the sub-heading "Ratio of Modernity Still Low" on page 202 of your January 15 issue you quote comments by Col. Ralph Budd upon the progress which has been made in lightweight freight cars. Colonel Budd said in part: "To a much greater extent [than in passenger equipment] it is true that the design and construction of lightweight freight cars, which will weigh less but carry more pay load, was only beginning to materialize, [when the war began] and of the two million freight cars on the railroads today an insignificant percentage are of this type. In fact, the lightweight freight car is not yet perfected for the reason that its cost, which is so vital in commercial transportation, has not yet been brought down to a point where the greater investment is clearly justified.

"The most that can be said for the progress in lessening the weight of freight equipment is that a good many semi-lightweight cars have been built. There is no doubt in my mind that this problem will be solved and that lighter cars, but not of the extremely lightweight that are justified in passenger cars, will be a feature of modern freight equipment."

There would seem to be some question as to precisely what was in Colonel Budd's mind when he made these statements. In one place he says that "Of the two million cars on the railroads today an insignificant percentage are of this [lightweight] type;" then later, "The most that can be said for the progress in lessening the weight of freight equipment is that a good many semi-lightweight cars have been built." How Colonel Budd differentiates between semi-lightweight and lightweight is not known. However, 2½ per cent of the freight cars on the railroads of the United States are built of lightweight or semi-lightweight construction incorporating one of the widely used low-alloy high-strength steels. In view of the time which is ordinarily required to introduce such new developments and considering the interruption caused by the war, referred to by Colonel Budd, this would seem to constitute substantial recognition of the weight-saving designs.

The old question of the chicken and the egg arises in the statement that the lightweight freight car has not been perfected because its cost has not yet been brought down. One could ask whether the cost can be brought down until the design has been perfected and placed into quantity production. Also, how earnestly are the railroads applying themselves to this phase of the problem? It is extremely difficult to get top management to consider the economic factors involved; too often decisions are made in terms of the lower maintenance cost desired by mechanical departments rather than the overall economics which point definitely to the substantial benefits derived from weight elimination and increased carrying capacity.

If Colonel Budd means that lightweight construction calls for

some specialties whose designs have not been adequately simplified and reduced in cost, one can agree with him. A highly important example relates to the braking equipment. It has now been determined to the satisfaction of designing engineers that an all-welded 50-ton hopper car on standard trucks, employing ordinary mild carbon steel in regular A. A. R. sections, need weigh no more than 37,500 lb.—and with hollow axles, 36,500 lb. The significance of this development is that under the present recommended braking practice, modern welded design, even without the reduction of section made possible when corrosion-resistant high-strength steels are employed, requires a variable-load brake. Under the recommended practice a 50-ton car weighing less than 40,600 lb. requires the empty and load brake, and in some instances engineers have actually added "dead weight" to their designs in order to meet this requirement and thus avoid the added cost of the present empty and load brake. This was not so serious when a matter of a few hundred pounds only was involved, but it becomes an item of first importance when, merely because of normal progress in engineering design and the use of welding, a reduction in weight of more than two tons below the permissible limit is not only possible but is becoming difficult to avoid. What it means is that, measured by today's progress, no modern design of hopper car can escape the need for a variable-load brake of some kind.

The empty and load brake is available to meet this situation. It has years of service experience back of it and has been proved economical in a number of railroad operations when used in connection with semi-, as well as extremely lightweight equipment.

By employing corrosion-resistant high-strength low-alloy steels in modern welded design a 50-ton hopper car can be built to weigh no more than 33,000 lb. without going to extremes in thinning down the body sheets and thus risk a shortening of service life. On this type of equipment the added cost of the empty load brake is definitely justified, however desirable it would be to have a simpler and less costly "variable-load" braking mechanism.

A decade of experience with lightweight freight-car construction of all kinds is now available as a basis for the advancement of the development. After examining all of the factors involved against the background of this experience, it can be stated as a general proposition that such equipment is profitable beyond expectations; that the original cost is little more per car than A. A. R. standard carbon-steel construction and that the cost per ton of carrying capacity is frequently less.

Colonel Budd's influence has been felt in the lightweight development. He has given consideration to the overall factors involved. This was clearly indicated by him in an address made before the American Railway Engineering Association at Chicago as early as March 11, 1936. He said: "The possibilities of lighter-weight equipment are intriguing. In 1934 approximately 400 billion ton-miles were made in handling freight and passenger cars, exclusive of the loads they carried. If, as is quite possible, these cars should be reduced one fourth in weight, it would require 100 billion less ton-miles to handle the business. At one mill per ton-mile that amounts to 100 million dollars a year."

FREDERICK D. FOOTE,  
President, Alloys Development Corporation



## Opposes Deadheading on Suburban Trains

CHICAGO

TO THE EDITOR:

I have read your editorials about the losses on the railroad suburban trains. You are on the right track, but why don't you start at the terminal? When railroad office employees worked at very low salaries it was O.K. to carry them to work free on suburban trains. Today all railroad employees receive better salaries than the general run of people who do similar work. So the first thing for you to do is to persuade the railroads to require their employees to purchase suburban tickets at same rates as the general public pays.

In other words you must ask the Interstate Commerce Commission to forbid the use of any kind of pass by any kind of employee on any suburban train and to forbid the use of any clergyman's one-half rate ticket on any suburban train. I understand that suburban passes are used by officers and employees of "foreign" railroads in the Chicago district.

If all dead head passengers are compelled to buy tickets for suburban trains, and all railroads use the I.C. method of double punching of tickets on suburban trains, you will find that most suburban losses will be reduced considerably and that some losses will be changed to profits.

I was a Pennsylvania Railroad employee 40 years ago, and I know considerable about the use and abuse of passes. Railroad employees who must ride on trains to go from one job to another between starting time and quitting time ought to be required to use trip passes so that their rides may be charged to the departments which employ them. Railroads lose much suburban patronage because the single ride tickets sometimes are higher than fares on suburban bus lines.

LEROY L. HUNTER, C.E.

## Racial Difficulties

ST. LOUIS

TO THE EDITOR:

In the December 4 issue of the *Railway Age* you styled an article "Color Line Eraser" dealing with the very foolish edict by the Committee on Fair Employment Practices wiping out with a simple wave of the wand by another Washington bureau a prevailing custom in the South that has existed for generations and shall continue to so exist.

The sooner some governmental crack-pots learn that white men of the Southern states would never fire a locomotive with a negro engineer, or that the people down there would never tolerate a negro conductor collecting tickets on a passenger train, then the better off the whole country will be. I will also admit I am somewhat surprised to note the *Railway Age* having a slight derailment in getting off on this question instead of sticking strictly to railroading.

If some of these people up North who are trying to force an equality of blacks and whites in the South would take the trouble to find out the true status of this subject they would soon realize they are gradually fomenting a revolution in this country instead of peace and harmony for the war effort.

I have been expecting for sometime that someone would open up and want some Asiatics promoted to engineers or conductors on the Pacific Coast lines—well, that is something the people in California, Oregon or Washington will not tolerate any quicker than the people of the South will having negroes on those jobs.

It is with satisfaction that I note in the St. Louis newspapers that the management of the Southern railroads mentioned in your article have told the C. F. E. P. they would not abide by their edict, all of which goes to prove that the management of the railroads against which the edict was directed know the true state of affairs and are working for the best interests of all concerned.

C. E. HAMILTON.

[We do not see wherein our correspondent can justly deem us "derailed" for objectively reporting the involvement of the railroads, through no fault of their own, in this unfortunate controversy. Surely our correspondent would not expect us to suppress railroad news of such importance.—Editor.]

## New Books . . .

*Official Proceedings Master Boiler Makers' Association, 1943.* A. F. Stiglmeier, secretary-treasurer, 29 Parkwood street, Albany 3, N. Y. 135 pages. Price, \$5.

Following a report of the Executive Board, a message by the secretary-treasurer, and the annual report of the secretary-treasurer in the 1943 year book of the Master Boiler Makers' Association are the reports of five committees: Topic No. 1—Application of Staybolts and Service Life Obtained from Various Types of Materials; Topic No. 2—Autogenous Welding and Cutting in Boiler Department; Topic No. 3—Blowing Down, Washing and Filling Boilers; Topic No. 4—Application, Maintenance and Blowing of Flues and Tubes; Topic No. 5—Cinder Cutting of Tubes and Flues—Causes and Prevention.

*Economic Union and Durable Peace*, by Otto Tod Mallery. Published by Harper & Brothers. 183 pages, 5½ in. by 8½ in. Bound in cloth. Price \$2.

A railway supply manufacturer, impressed by the desirability in the general interest of a constructive national program for dealing with economic problems on a world-wide basis in the post-war period, has commended this book to our consideration, in the belief that *Railway Age* readers would welcome having their attention drawn to it. In the foreword Wesley C. Mitchell, director of research of the National Bureau of Economic Research, points out that the author "had 30-odd years of practical experience in designing new social machinery and making it work before he entered the field of international economics." He then participated in conferences of the International Labor Organization and had an opportunity of studying critically the Hull reciprocal trade agreements and the lend-lease program. From these experiences he has conceived a so-called "Economic Union," which is asserted to be based on these tested principles:

1. If goods cannot cross political frontiers, soldiers will.
2. Unless shackles can be dropped from trade, bombs will drop from the sky.
3. Economic bargains likely to be kept, are preferable to political agreements likely to be broken.
4. Mass unemployment was not overcome by the trade and economic policies adopted by the principal industrial nations during the period between wars, except while preparing for war. Therefore these policies were failures and must be superseded.

To start the movement which he favors toward solution of these difficulties, Mr. Mallery makes five proposals:

1. That the United State government take the initiative in forming now the nucleus of such a postwar Economic Union.
2. That the board of managers of Economic Union be modeled upon the governing body of the International Labor Organization. Thus the board of managers of Economic Union would be threefold, i.e., composed of representatives of organized employees, of organized managers and of governments.
3. That the Hull Reciprocal Trade Agreement Program be one of the foundations.
4. That the first partners of Economic Union be chosen now.
5. That the Inter-American Bank be organized now as a preliminary to setting up the Economic Union Bank later.

The author indicates other specific proposals that would flow out of the consummation of these first five.

One chapter of the book includes a comparison of six plans which have been advanced for the preservation of world peace; it emphasizes the close interrelationship of these plans, which are said to be interdependent and not opposed to one another.

The accomplishment of a lasting peace is no easy or simple problem; indeed, there are many people who believe that as long as human nature is what it is, there can be no sure way of preventing war. But that does not preclude the application of reason and logic to the solution of such parts of the problem where their applicability seems obvious. It is, accordingly, in the national interest, as well as in that of individuals, that intelligent citizens apply their critical wisdom to plans such as those advanced by Mr. Mallery, with the hope that, at length, as many of the causes of war as possible may be eradicated.

We can't afford to fight very many more conflicts on the scale of the present one.

# Railroads-in-War News

## Seeks to Expedite Movement of Oil

Eastman finds there has been some easing up and he wants heat put on

The Office of Defense Transportation announced January 25 that it is taking "immediate steps" to speed up the eastern petroleum movement because there has been "a general slowing down of tank car movements," coupled with a "growing insufficiency of the tank truck fleet" as a result of manpower and material shortages. It was explained, too, that tank cars have been withdrawn from the eastern movement to care for "imperative" requirements elsewhere.

Among the steps taken to meet the situation were these: 21 Interstate Commerce Commission service agents and 40 Association of American Railroads Car Service Division representatives have been assigned, at O. D. T.'s request, to give special attention to tank car movements; and the A. A. R. has reissued "its order of last year requiring that oil traffic be given priority handling next to troop movements and other special war traffic."

**Jacks Up Oil Cos.**—In a letter to oil company officers in this connection, O. D. T. Director Eastman said in part:

"A critical situation exists in petroleum transportation which requires action on the part of all of those concerned in it. There has been a slow-down in the movement and handling of tank cars and tank trucks which has resulted in deliveries substantially below those of a few months ago in the face of increasing demand to meet direct and indirect requirements of the war.

"This slow-down has resulted in a serious and still growing shortage of tank cars and tank trucks which must be corrected by increasing operating efficiency on the part of shippers, carriers and receivers."

Among steps suggested by Mr. Eastman to accomplish this were resumption, where it had been abandoned, of the practice of prompt loading and unloading of tank cars 24 hrs. a day, including Sundays and holidays; release "during this critical period" of tank cars "not actively used under these more expeditious arrangements"; and arrangements for loading and unloading over-the-road tank trucks so they can be operated on a 24-hr.-day, 7-day-week basis.

### O.D.T. Appointment

H. A. Hollopeter has been appointed associate director, Division of Railway Transport, Office of Defense Transportation.

Mr. Hollopeter, traffic director of the

## Took Somervell's Plane to Get to Rail Jobs

How much the Army "meant business" in putting government control of the railroads into effect when President Roosevelt gave the order is revealed by War Department disclosure of the unorthodox means taken to get some of its zone operational officers on the job promptly.

On December 27, the day the executive order was issued, these officers were in Washington, D. C., to receive final instructions. When the order became effective at 7 p.m. on that day, it was desired to get the official operational plans and the key officers to their respective zones as quickly as possible.

Due to unfavorable weather, all commercial planes in service across the Allegheny mountains had been grounded. Lieut. Gen. Somervell's private plane was made available for the occasion, however, and the official documents and the three zone operational officers assigned to the West were taken in it as far as Chicago, where commercial service was available.

The officers involved were the chief operational officers of the 6th, 7th, and 9th transportation zones, Cols. D. A. Hardt, Harry G. Williams, and C. P. Hamley, respectively, their headquarters being in Chicago; Omaha, Neb.; and Salt Lake City, Utah.

Indiana State Chamber of Commerce, has been loaned to O. D. T. to take charge of its shipper advisory committees which are located in the principal cities of the country.

"O. D. T. officials," according to the press release, "said that they are exploring the possibilities of extending the scope of the committees' work to make it more responsive to the needs of other divisions of the O. D. T. Plans are also under way to make a more effective use of the committees' recommendations by the various divisions."

## Schwartz Confirmed for New Mediation Board Term

The Senate on January 24 confirmed President Roosevelt's reappointment of former Senator Harry H. Schwartz of Wyoming to the National Mediation Board for a new term expiring February 1, 1947. The nomination had been reported favorably from the committee on interstate commerce on January 21.

## Wage Raises Keep Accountants Busy

Roads' bill to be \$360 million a year more—The colonels remain on the job

While the seven railway presidents who were commissioned colonels in the Army in connection with their appointments as regional directors of railroads during the period of Army control were still in uniform this week, it was explained at the War Department that their early retirement to inactive service was anticipated. As indicated when Secretary of War Stimson returned the roads to private control, the principal remaining duty of the seven colonels was to secure from the roads that had been under their nominal directions proper legal releases to protect the government from liability arising out of claims against the carriers originating during the period of Army control.

These were being executed as rapidly as the circumstances permitted, there being some cases where action by the board of directors could not be secured immediately, it was explained. By January 26 it was reported that 466 out of some 700 carriers had executed the required documents, and no great delay was expected in obtaining the rest. It was understood that the retirement of the seven colonels would not necessarily be delayed until the last road had complied with this legal requirement, as their duties would be regarded as completed when substantially all the releases have been executed.

**Short Line Wages**—While the application of the recent wage settlements to the short lines was still incomplete, pending disclosure of the recommendations of the reconvened special emergency board, the so-called Shaw board, the controversies were generally considered to be resolved, all threat of strikes having been disposed of by the President's award and by agreements between the unions and carriers before the Army relinquished control of the roads, and the accounting and disbursing staffs of the individual lines were hard at work to put the new wage scales into effect.

The retroactive phases of the recent agreements will cost the Class I roads about \$205,000,000, according to Association of American Railroads estimates. This sum includes about \$30,000,000 for the members of the five operating brotherhoods, of which substantially all already has been paid, and about \$175,000,000 for the non-operating employees. As outlined in *Railway Age* of January 22, page 245, the sliding-scale 4-to-10 cents per hour raise awarded the non-ops by the Shaw special



emergency board in November was made retroactive to February 1, 1943, while the Stacy board's award of 4 cents per hour to the ops was made retroactive to April 1, 1943.

#### F. D. R. Increases Began Dec. 27—

Only those parts of the wage increases which were considered as adjustments in the basic hourly rate were subject to the retroactive provisions. However, increases "in lieu" of overtime and of expenses away from home and, in the case of the ops, for vacations became effective December 27, 1943, so that a relatively small amount of accumulated pay also will be due the employees on that account.

On the basis of current employment figures, the annual cost to the Class I roads of the wage increases has been estimated at about \$360,000,000. This total is made up of about \$252,000,000 more allowed the non-ops in their 9-to-11 cents adjustment, plus some \$88,000,000 more for the ops allowed as an increase of 9 cents per hour, plus perhaps as much as \$20,000,000 additional expense to the roads resulting from the vacation arrangement for the ops. In addition, it has been pointed out that the roads will be put to some additional expense on account of collateral increases for employees who do not benefit directly from the negotiated agreements.

**Most Costly to Poorer Roads**—Just what effect such additional expenses will have on net revenues is difficult to estimate, because some of the increase will be offset by reductions in federal taxes, the extent varying from road to road in proportion to the excess profits tax status of the individual carriers. It has been pointed out that some of the more prosperous roads will be able to absorb 60 per cent or more of the additional expense arising from the wage increases through offsetting tax reductions, so long as current record-breaking business is available, before the effect shows up in the net. On the other hand, many roads will not be in a position to pass on to the federal government such a large portion of the added cost resulting from the recent wage settlements, even under present conditions, and relatively few can be sure of being in the higher tax brackets in the post-war period.

As one indication of the consequences of Economic Stabilization Director Vinson's refusal to approve the straight increase of 8 cents per hour to which the non-ops agreed in August, 1943, it was pointed out that the annual added cost to the roads on that "inflationary" basis was estimated at about \$204,000,000, as compared to the \$252,000,000 expected to result from the current agreement. In return for the additional expense, the roads have such insurance against further demands for overtime pay for the duration as is contained in the agreement negotiated with the unions. The yearly additional cost of the Shaw board's 4-to-11 cents sliding-scale award to the non-ops was estimated at about \$193,000,000, so that the "in lieu" provisions in the non-op settlement added some \$59,000,000 to the roads' wage bill.

**Raises for Other Employees**—In order to facilitate agreements between the unions and certain short lines and other

carriers not parties to the settlements negotiated through the three carrier conference committees, to which it was understood that the same money terms would be made applicable when they could be formally effected, Dr. William M. Leiserson, chairman of the National Railway Labor Panel, on January 22 made public a formal authorization for such additional agreements, reading as follows:

"In order to avoid intra-carrier and inter-carrier wage and salary inequities and to maintain stabilized wage and salary relationships, it is hereby found to be permissible under the authority of Executive Order 9299 for any carrier covered by Title I of the Railway Labor Act (except the Railway Express Agency, Inc.) to adjust wages or salaries of employees and subordinate officials without prior notice or application to the chairman of the National Railway Labor Panel and without his specific approval, *provided*, the adjustments are in accordance with the terms of agreements of December 29, 1943, January 14, 1944, or January 17, 1944, between the carriers' conference committees and national railway labor organizations representing operating and non-operating employees and do not exceed the increases provided for in such agreements.

"Nothing in this authorization shall be construed as directing or ordering any carrier to grant an increase in any amount, but increases within the limits declared permissible may be made without further approval.

"This authorization applies only to employees within the meaning of the Railway Labor Act, which includes subordinate officials. Salary adjustments for persons occupying official positions are subject to approval by the commissioner of Internal Revenue."

**To De-Vinsonize Railroads?**—The Truman-Crosser resolution, as amended, the effect of which would be to make the National Mediation Board, and not the Economic Stabilization Director, the final authority to approve wage adjustments under the Railway Labor Act as in conformity with the stabilization program, remained under consideration in the House committee on interstate and foreign commerce and in the subcommittee charged with the task of considering and reporting on such a measure, and there were no indications that it would be treated as urgent legislation.

There was little comment in Congress on the railway wage situation after the recent settlements were effected. In an extension of remarks in the Congressional Record of January 21, Representative Lea, Democrat of California and chairman of the House interstate commerce committee, reviewed the accomplishments of the railroads in handling wartime traffic, saying that "the fact that our American railroad system, though undermanned and its equipment undersupplied, is carrying the burden of freight and passenger traffic never before envisioned, gives confidence to the country that it may continue to get supplies and men to the right place at the right time in the important days of the conflict yet remaining."

Mr. Lea included in his remarks letters

of J. J. Pelley, president of the A. A. R., and George M. Harrison, spokesman for the non-ops—thanking President Roosevelt, respectively, for the Army's prompt action in assuming and relinquishing control of the roads, and for the President's "help" in bringing about a settlement of the wage issue—the texts of which appeared in *Railway Age* last week. He also quoted in part a letter of Gen. H. H. Arnold, commander of the Army Air Forces, referring to that service's dependence on domestic rail transportation, which appeared in the January 8 issue, page 154.

### Britain's Railway Shops Now Build Planes

Britain's railway shops, already strained by wartime burdens, have added plane building to their work, according to a release by British Information Services. Some shops now turn out complete four-engine bombers; others work on air engines and body repairs.

One London & North Eastern shop has adapted its coach building and varnishing departments to every change in aircraft operational requirements throughout the war. It has built parts for Swordfish planes, dive-bombers, Horsa troop-carrying gliders and aircraft which are still secret. Recently it has concentrated production on 30-ft. wing sections for Lancaster bombers.

These sections have 500 parts, all of which are produced, forged, stamped and built up in the railway shop from sheet plate. Railway workers—52 per cent of them women—make the tools and do all processing work, such as machining, pressing, drilling and riveting.

The idea of harnessing to the air effort the building and engineering resources of Britain's four main railroads and the London Passenger Transport System originated during the Munich crisis and was put into practice at the outbreak of war.

### N. Y. Grand Central's at New Record

Passenger traffic in and out of Grand Central Terminal in 1943 totaled 59,929,493, the highest in its history, J. H. Hustis, Jr., terminal manager, has reported. This is an increase of 17.4 per cent over 1942, the previous record year, when passengers totaled 51,044,587.

The terminal's biggest day since it was opened in 1913 was December 24, 1943, when passengers in and out totaled 222,005, against the previous high of 209,272, attained December 24, 1942. The maximum number of passengers carried in and out of the terminal in any one month was 5,591,350 in July, 1943. Five other months each totaled over five million. The previous maximum month, December, 1942, when 4,720,086 passengers were counted, was exceeded by each of nine months in 1943.

In 1943, the terminal's traffic exceeded 150,000 for 300 days, against 145 days in 1942. In 1943 there were 14 days when passengers in and out exceeded 200,000, against a single day in 1942.

Through passengers reported on New York Central trains and the full-fare passengers on New York, New Haven & Hartford trains were both more numerous than in any previous year. Through and full-

fare passengers for both roads were 45.49 per cent of the total traffic and suburban and reduced fare passengers made up the remaining 54.51 per cent. A steady gain in commuting passengers, who for both roads totaled 32,665,121, was recorded but the largest increase was in through and full-fare passengers, who totaled 27,264,372 for the year.

## British Railways in War

A 66-page booklet—"Facts About British Railways in Wartime"—has been issued by the British Railways Press Office. Profusely illustrated (there are 55 excel-

lent black and white photographs), the brochure deals with such topics as: Motive power; track; signaling; operating controls; central control of freight trains; improvement schemes for expediting traffic; a detailed account of one day's movement of "Train 300"—a troop train; receipts and expenditures of main line railways; capitalization; notes on war factories, food and coal; government control; London transport; wartime demands being made upon railway-owned hotels, docks, and steamships; air raid precautions; ambulance trains; and air raid damage and repairs. In addition, there are four pages of handy thumb-nail facts.

# Materials and Prices

The following is a digest of orders and notices of interest to railways issued by the War Production Board and the Office of Price Administration since January 6:

**Changes in Preference Ratings** — Preference ratings available to various industries for maintenance, repair and operating supplies (MRO) have been adjusted to reflect a revised pattern of relative urgency. The ratings have been adjusted by means of changes in the lists of CMP regulation No. 5. Those industries which are included in List I are eligible to use an AA-1 preference rating, and those in List II an AA-2 preference rating to obtain MRO items.

The changes which were made on January 8, by Amendment No. 3 to CMP No. 5, as amended September 13, 1943, are as follows: (1) Batteries, dry cells have been moved from List II to List I, thereby making the AA-1 preference rating available to manufacturers of these products; (2) a new listing has been included for lighting equipment and accessories other than aircraft, airport and marine, which permits the manufacturers of these products to use the AA-2 rating; (3) use of the AA-1 rating has been limited to manufacturers of search lights and flood lights, thus making manufacturers of spot lights and parts ineligible to use it. Formerly, manufacturers of all these products were eligible to use the AA-1 rating; (4) public warehouses eligible to use the AA-2 preference rating have been limited to dry and open storage warehouses; (5) refrigerated warehouses of perishable food products have been made eligible to use the AA-1 preference rating, by being included in List I.

**Hard-Facing Materials** — Restrictions on the distribution, sale and use of hard-facing materials were removed January 12, by the WPB. These materials are alloys containing cobalt, chromium, tungsten, nickel, molybdenum, vanadium or secondary aluminum. This action was effected by the revocation of General Limitation Order L-223, and was made possible by the current satisfactory supply-demand situation of the alloying materials involved.

**Southern Yellow Pine**—Purchase orders for southern yellow pine lumber and specified species of hardwood may be placed through wholesalers without designating the individual producers from whom the lumber is to be obtained. The procedure is set forth in Direction 2, issued January 10, to Order M-361 (southern yellow pine) and M-364 (specified species of hardwood) and is designed to reduce paper work and facilitate administration of the orders, WPB said.

Under provisions of the orders, purchasers requiring specific WPB authorization are required to designate the producers from whom the lumber is to be purchased on their application for authorization (Form WPB-2720). By means of the simplified procedure for the many buyers who place their orders through wholesalers who in turn buy from a large number of small producers—often as many as 100—such buyers may designate the wholesalers instead of the producers on the application forms. In this case, the application must state that authorization is sought under Direction 2. Without such statement the application will be denied because the producer or producers are not designated. The wholesaler may certify to the producers that the purchase order has been authorized by WPB, through Form WPB-2720.

**Valves**—Amendments to Limitation Order L-252, issued January 6, grant permission to manufac-

turers to use either brass or bronze in place of carbon steel in making nuts for several categories of valves. Specifications include nuts for packing gland flange bolts or studs in manufacturing iron gate valves and iron globe and angle valves. The use of brass or bronze also is allowed in the manufacture of nuts for attaching the swing check disc to hinge or arm of an iron check valve.

**Oil Paints**—The War Food Administration said today that the oil content of paints, varnishes, linoleum, coated fabrics and other fats and oil products delivered to Government operated railroads are not exempt from quotas established by Food Distribution Order No. 42, which regulates the use of all fats and oils. The linseed oil content of linseed replacement oil used by the railroads also is subject to limitations under the linseed oil delivery order (FDO No. 63). The question of exempt uses was raised by the paint industry soon after operation of the railroads was taken over by the Secretary of War late in December.

## Prices

**Freight Car Castings**—An upward adjustment of 17 per cent in the ceiling prices for miscellaneous freight car castings to compensate for increased production costs principally labor, was announced January 14, by the OPA. Approximately 60,000 new freight cars, 20,000 for domestic use and 40,000 for foreign needs of the War Department and for Lend-Lease requirements, are to be constructed in the first six months of 1944, OPA said. Because of increased cost of production, the higher prices for miscellaneous freight car castings are necessary for unimpeded production, the price agency added.

The increase is the only upward adjustment in prices for the castings since ceilings were established in November, 1941, at the levels prevailing in July of that year, OPA said. The following changes in pricing provisions for steel castings and railroad specialties also were announced: (1) Uniform extras now are established for machining principal freight car castings required in this year's railroad rolling stock construction program. Establishment of uniform extras, to replace the previously existing varied extras, brings no overall net change in ceiling prices for these extras. (2) Increases of 10 per cent in maximum prices for high tensile steel bolsters and 11 per cent for rigid yokes, are established to match increase previously authorized in ceilings for Grade B steel bolsters and rigid yokes. (3) Extras of 80 cents per bolster are established for bolsters made for use on the ASF (American Steel Foundry) Ride Control A-3 trucks, and for Railway Truck Corporation Snub-up bolsters. (4) In another pricing change, ceiling prices for steel castings now are specifically made applicable to two or more steel castings which are welded together, also steel castings which have parts made of other materials cast integrally in them.

**Oak, Pecan and Miscellaneous Hardwood Flooring**—Beech flooring produced in the Southern, South Central and Appalachian hardwood lumber regions was supplied with specific dollars-and-cents ceiling prices by Amendment No. 2 to MPR No. 458 (Oak, Pecan and Miscellaneous Hardwood Flooring), effective January 17.

As in the case of the new dollars-and-cents ceilings announced last month for oak flooring, the new beech flooring maximums are approximately 24 per cent above previous ceilings, which were the highest prices individual sellers charged

during March, 1942. The higher prices may be passed on by distributors to consumers.

The new ceilings for standard and Victory grades of beech flooring produced in the three regions, f. o. b. mill, in carload lots, are as follows:

Flooring <sup>25</sup> / <sub>32</sub> -in. by 1 <sup>1</sup> / <sub>2</sub> in.	
Grade	Ceiling Price per M.b.m.
First grade—red	\$74.50
First grade	68.50
Second grade	66.00
Third grade	54.50
Third grade and better shorts	48.50
Victory grade	64.50

Flooring <sup>25</sup> / <sub>32</sub> -in. by 2 <sup>1</sup> / <sub>4</sub> in.	
Grade	Ceiling Price per M.b.m.
First grade—Red	\$90.00
First grade	84.50
Second grade	81.50
Third grade	68.00
Third grade and better shorts	62.00
Victory grade	79.00

Flooring <sup>25</sup> / <sub>32</sub> -in. by 3 <sup>1</sup> / <sub>4</sub> in.	
Grade	Ceiling Price per M.b.m.
Victory grade	85.00

Dollars-and-cents ceilings also are established for prefinished beech flooring; these range from \$100.50 to \$109.50 per 1 M.b.m. according to grade and specifications.

The foregoing ceilings are applicable to beech flooring produced in Texas, Oklahoma, Arkansas, Louisiana, Mississippi, Tennessee, Alabama, Florida, Georgia, South Carolina, North Carolina, Virginia, West Virginia, Missouri, and parts of Maryland, Kentucky and Illinois.

In a tightening of its price controls in the flooring field, OPA today announced that beginning January 17, producers of hardwood flooring of any species, for which specific dollars-and-cents ceilings have not been provided, must submit proposed prices for the items to OPA for approval. Previously manufacturers could use the highest prices they charged during March, 1942, as their ceiling prices for such products.

**Used Typewriters**—Adjustments in some of the rental provisions of the used typewriters regulation, and other changes for the purpose of clarification, were made today by Amendment No. 1 to RMPR 162 (Ceiling Prices for the Sale and Rental of Used Typewriters), effective January 17.

These changes were as follows:

1. The distinction between "commercial" and "non-commercial" rentals was clarified.

2. A former prohibition against charging for the conversion of standard to special-use machines, even at a customer's request (that is, making type changes, keyboard alterations, etc.) has been revoked. The charge for such conversion must not exceed the supplier's March, 1942, ceiling charge. The permission does not, however, sanction a charge for the conversion of special machines to standard ones.

3. Charges for packing typewriters for shipment are now permitted, in an amount no greater than the seller charged in similar circumstances during the base period. The ban on charges for packing rented typewriters for shipment is removed. The previous stipulations that delivery and pick-up charges must be reasonable, must be requested by the customer, and must be charged separately are extended to apply also to packing of rentals for shipment.

4. On a "rental with maintenance service" basis, the supplier has been freed of the obligation to repair rented machines at the place where they are used. Typewriter suppliers, however, still are required to maintain their rented machines in good working condition when brought back to their places of business. Unless "rental with maintenance service" is continued, the regulation's lower rate for "rental without maintenance" applies.

5. The allowance made for a used typewriter traded in as part payment for another machine must be at least as much as was specified for the trade-in machine in the 1942 allowance schedule of a typewriter manufacturer. Previously, allowances were "frozen" at individual base-period levels. Since typewriter ceiling prices are established in dollars and cents, OPA has found it desirable for all concerned to have uniform minimum allowances on traded-in machines.

6. Minor changes are made in definitions of the regulation to reduce the "demonstrator" machine guaranty period from 12 to six months in order to conform more closely to common industry practice. At the same time, previous requirements to dismantling and inspecting have been eliminated from the definitions of "rebuilt" and "reconditioned" machines.



# GENERAL NEWS

## More Government Controls Are Likely

Foreseeing this, Eastman calls on colleges for better men and higher standards

After expressing the opinion that the role of the government in the post-war era, while it will shrink from its wartime status, will be "considerably greater" than before the war, involving "problems of tremendous scope and difficulty," Director Eastman of the Office of Defense Transportation in an address last week sounded an appeal for "a better informed and disciplined citizenry and public officials with a higher average of sound and strong character," who must "show less inclination to regard the end as justification for the means and more readiness to endanger their personal careers in the defense of principles."

**Professors as Public Officials**—Speaking on January 21 before a joint meeting at Washington, D. C., of the American Economic Association and the American Political Science Association, Mr. Eastman stressed the obligation of the colleges and universities to contribute their influence "in making possible better standards of life and improving public service." Explaining that his own agency staff included 8 Ph.D.'s, Mr. Eastman commented that college faculties have been well represented in government in the current war, and went on to say that "the chief handicap under which they are apt to labor is inexperience in dealing with the public and public representatives as a public servant, and in putting theories into practical operation."

The O. D. T. director spoke at some length of the duties of his organization, of its relationships with many other government agencies, and of the "high degree of success, all things considered," with which wartime needs for transportation have been met through private management and operation of the railways. "This does not mean that I am a dogmatic opponent of public operation of railroads or other public utilities," he remarked. "There are conditions where such operation is wise, . . . as we found in the last World War. The choice is one which should be made after a cold-blooded appraisal of conditions, as free as possible from prejudice one way or another."

**Private Operation Doing Well**—In view of the wonderful response of management, shippers, employees—"except for the wage controversies"—and "to a very considerable extent" of the public, to the wartime challenge to private industry to

make good, said Mr. Eastman, "I could see no good to be accomplished, and much to be lost, by a shift in possession and management. . . . It is always a good rule not to change what is working well, and I have never had any doubts, since the start of the Office of Defense Transportation, that this was the sound rule to follow with respect to domestic transportation."

The speaker did not "wholly indorse" the "very common reaction at present" to contrast government operation of the railroads in World War I—"which is stigmatized as a horrible failure"—and private operation in this war—"which is painted as a brilliant success." In the last war the government took over the roads, he said, for two principal reasons: First, because the conclusion was reached that only the supreme authority of the government could achieve the "centralized direction and coordination" required to cope with the confusion and congestion that resulted from lack of preparation; and second, but "commonly overlooked," because "prices had risen so steeply that a large wage increase was deemed inevitable," to meet which private operation "would require a large increase in rates and fares." The latter was accomplished, he pointed out, "by fiat and without preliminary hearings."

**Carriers Prepared, This Time**—While government operation of the railroads was not, in his opinion, "the failure that it is commonly reputed to have been," nevertheless, Mr. Eastman explained, different conditions that prevailed at the onset of this war "permitted and counselled adherence to private operation," including the state of preparedness of both the roads and the military services, the improved physical condition of the railways, and the preliminary work of the Advisory Commission of the Council of National Defense, on which the railroads were represented by Ralph Budd, president of the Chicago, Burlington & Quincy.

## December Operating Revenues 8.7 Per Cent Above 1942

From preliminary reports of Class I roads, representing 81.7 per cent of total operating revenues, the Association of American Railroads has estimated that railroad operating revenues in December, 1943, were \$624,130,822, compared with \$574,181,076 in December, 1942, an increase of 8.7 per cent. This estimate, the A. A. R. pointed out, "covers only operating revenues and does not touch upon the trends in operating expenses, taxes, or final income results."

Estimated December freight revenues were \$455,474,266, compared with \$433,986,961, an increase of 5 per cent. Estimated passenger revenues totaled \$122,231,101, compared with \$97,534,421, an increase of 25.3 per cent.

## House Gets I. C. C. Appropriation Bill

Committee recommends \$9,181,700 for fiscal year ending June 30, 1943

Appropriations totaling \$9,181,700 to cover Interstate Commerce Commission activities during the fiscal year ending June 30, 1945, are carried in the Independent Offices Appropriation Bill which was reported from the House committee on appropriations on January 26. This is \$269,000 more than the \$8,912,000 appropriated for the current fiscal year ending June 30, 1944, but \$155,000 less than the Bureau of the Budget's estimate.

The \$155,000 was taken from the estimate covering the Bureau of Valuation, the Budget Bureau figures being accepted by the committee for all other activities of the commission. Thus the Bureau of Valuation is in the bill for \$500,000, as compared with the \$600,000 appropriated for it in fiscal 1944, and the Budget estimate of \$655,000 for fiscal 1945. The Budget estimates were reported in the *Railway Age* of January 15, page 211.

**Valuation Bureau Trimmed**—With the reporting of the bill the committee made public testimony which had been taken in December at executive sessions before a subcommittee which had charge of the measure. An elaborate presentation in support of the Bureau of Valuation estimate was made there by Commissioner Miller; but the committee remained unconvinced that the Bureau's work was particularly pressing when it could be shunted aside for special assignments from war agencies.

"During hearings," said the committee's report, "it was disclosed that this agency had deferred its own valuation work to perform similar work for the Maritime Commission and the Navy Department for which it was reimbursed under section 601 of the Economy Act. It was also disclosed that the Valuation Division is 10 years behind in the posting of changes in valuation, and it would appear that a further slackening of this work during the active period of the war would not be too serious a matter. In view of these conditions the committee believes that a reduction on \$155,000 in the estimate is justified."

At the subcommittee's hearings the principal statements in support of the commission estimates were made by Commissioner Mahaffie and Secretary Bartel. However, Director Lacey of the Bureau of Valuation was on hand to supplement Commissioner Miller's presentation; while Commissioner Rogers commented briefly on the motor

(Continued on page 297)

may be  
Victory  
e three  
are as

M.b.m.

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

## Eastman and Rogers Win Senate's Okay

### Wheeler asks questions about Turney and Eastman defends him

The Senate on January 24 confirmed President Roosevelt's reappointment of Joseph B. Eastman and John L. Rogers to the Interstate Commerce Commission for new terms expiring December 31, 1950. The nominations were reported favorably from the committee on interstate commerce on January 21, the committee having acted promptly after the close on that day of the hearings wherein a practitioner before the commission had asked that action on the Rogers nomination be deferred.

As noted in the *Railway Age* of January 22, page 256, the objector to Mr. Rogers was E. Adamson, who blamed the commissioner for the commission's delay in disposing of proceedings involving applications of Allied Van Lines, Inc., for a certificate under the Motor Carrier Act's "grandfather" clause covering operations as a motor carrier of household goods throughout the country. Mr. Adamson is opposed to the Allied application which has been pending since 1936; but Allied has meanwhile filed an application for approval of a pooling plan among its 362 trucking-company members, and has proposed to withdraw the "grandfather" application if the pooling plan is approved.

**Wheeler Tilts with Turney**—Mr. Adamson's protest was unsupported at the hearing, where he was followed by twelve I. C. C. practitioners and representatives of labor organizations who came to the defense of Mr. Rogers. Last of these Rogers supporters was J. R. Turney, counsel for Allied and former director of the Division of Traffic Movement, Office of Defense Transportation, who traded a couple of verbal blows with Senator Wheeler, chairman of the committee.

Coming back for the hearing's second session on January 21, Chairman Wheeler was interested only in Mr. Turney's activities as counsel for Allied. Specifically, he wanted to know whether Mr. Turney who had testified that he had been counsel for Allied since June, 1941, had been so retained between January, 1942, and February, 1943, when he was employed by O. D. T. It was explained by Mr. Turney's son—Lieut. J. R. Turney, Jr., U. S. N.—that his father had dissolved his law firm upon accepting the O. D. T. appointment, turning over the Allied case to him (the son).

There was also some discussion of Mr. Turney's attendance at an Allied convention early in 1942. Lieut. Turney explained that his father had attended that convention for the sole purpose of advising his client that he could no longer continue as counsel, but would turn the matter over to his son if that were agreeable to Allied, which it was. Lieut. Turney, who said he attended the convention with his father, also denied that the latter had there stated that the Allied pooling plan had been discussed with the commission and with Mr. Rogers personally, and that it was agreeable to the com-

mission. Senator Wheeler said he had been informed that Mr. Turney had made such a statement; but Mr. Rogers denied that Mr. Turney had ever discussed Allied's pooling proposal with him.

**Eastman Defends Turney**—Meanwhile Mr. Eastman, like Mr. Turney, had also manifested some disposition to trade verbal blows with Chairman Wheeler.

When the chairman asked if O. D. T.'s certificate-of-war-necessity plan for trucks had become advertised as "Turney's Turkey," the O. D. T. director said he had not been so informed, adding "I don't think it's of an consequence, anyway—I don't think it has anything to do with John Rogers' confirmation."

Senator Wheeler shot back with, "I'm going to inquire into Turney's activities whether you like it or not." And Mr. Eastman said, "I'll answer anything you ask, but I still don't think it has anything to do with John Rogers." After he had concluded his questioning and heard Lieut. Turney, the chairman, making no distinction between O. D. T. where Mr. Turney was employed and the I. C. C. before which he is now practicing, had this to say: "I don't know Turney, and I never heard of Allied Vans, but I do say it is bad practice for a man to go with a commission and then step out and practice before them."

Previously Mr. Eastman had defended Mr. Turney, saying "I don't know of a lawyer in my acquaintance who has higher standards of ethics than John R. Turney." The O. D. T. director recalled how Mr. Turney had left a \$22,500 a year job as vice-president of the St. Louis Southwestern to come with him when he was federal coordinator of transportation; and how he had virtually drafted Mr. Turney for the O. D. T., where he was "responsible for some of the best things my office has done."

### Freight Loss and Damage In- creases 21.8 Per Cent

Freight loss and damage payments, as reported by member lines of the Freight Claim division of the Association of American Railroads, increased 21.8 per cent during the first nine months of 1943, as compared with the same period of 1942, the totals being \$29,531,762 and \$24,245,080 respectively, for the two periods. Loss and damage to fresh fruits, melons and vegetables increased 35.1 per cent during the same period, or from \$3,807,100 to \$5,144,986.

### Conserves Manpower by "Full Crew" Modification

Because of modifications of Sections E, F and G of the Full Crew law of California, the four major railroads of that state were able to keep their freight trains moving in the face of an acute manpower shortage during the period from July to November, 1943, according to the Safety division of the California Railroad Commission. During that period, 6,240 freight trains of more than 49 cars each were operated by the four railroads with less than the number of brakemen required by the law, 15,831 brakemen being used as compared with the 23,163 brakemen that would have been required under the Full Crew law.

## Pullman May Stay In Manufacturing

### It can set apart operating company instead, if it prefers

A victory was won by Pullman, Inc., in the monopoly case brought by the government, when the District Court at Philadelphia, Pa., on January 22, filed an opinion which permits Pullman, Inc., to decide whether to divorce its sleeping car service or its manufacturing business to satisfy the demands of the government. The suit was brought against Pullman on July 12, 1940, by Thurman Arnold, assistant attorney general, who contended that the Pullman group of companies held an unlawful monopoly in operating sleeping car services in interstate commerce. A three-judge expediting court for the District Court for the Eastern district of Pennsylvania handed down its opinion on April 20, 1943, in which it directed Pullman, Inc., and attorneys for the plaintiff to work out a decree based upon six conditions which it deemed relevant. Since that date, conferences have been held between the parties concerned as directed. In the meantime a proposed decree was filed by the government.

**Can Remain Manufacturer**—One of the contentions of the government was that Pullman, Inc., divorce its manufacturing business and retain its sleeping car business. Another was that the Pullman Company be ordered to purchase sleeping cars on a competitive basis. Pullman, Inc., contended that the objectives sought by the government can be brought about by less drastic measures and that it has the right to decide whether to divorce the sleeping car service or the manufacturing business.

In the opinion handed down on January 22, 1944, Judges Maris and Goodrich concurred while Judge Biggs dissented in part from their views. In the majority opinion, "the public interest requires complete separation but does not require that the court make the choice for Pullman, Inc." Judge Biggs, in his opinion, "would require Pullman, Inc., to dispose of its interest in the Pullman-Standard Car Manufacturing Company and that the Pullman Company when it purchases new cars, proceed by way of a competitive system."

"The opinion on January 22, was preliminary to a final decree," according to David A. Crawford, president of the Pullman Company, "and merely sets forth additional views of the court as to the form the final decree should take. Until we have had opportunity for thorough study and analysis of the effect of the provisions of that final decree, when entered, upon the conduct of our business, we are unable to state what action the Pullman group of companies will take."

**Possible Alternatives**—In its opinion the court said: "The determination of the terms of the judgment which will accomplish that which is necessary in the public interest and which will not deal unfairly with the defendants has been a matter of some difficulty. The major subject of dispute between the parties and the point



which has most troubled the court is the extent to which the present tri-party relation among Pullman Company, Pullman, Inc., and Pullman-Standard shall be affected.

"The government argues that Pullman, Inc., should be directed to dispose of all interest in Pullman-Standard; in other words, present owners of the combined Pullman enterprises are to dispose of the manufacturing business and to stay in the sleeping car business. Defendants argue, in turn, that freedom of the market will be accomplished by provisions much milder than this. Their point is that elimination of the exclusive dealing features as between Pullman and the railroads and the establishment of an open market in the purchase of sleeping cars, by terms of the judgment, will accomplish all that the findings and the opinion of this court require.

"Our conclusion is that the public interest requires the complete separation in ownership and direction of the business of manufacturing and the business of operating sleeping cars. We think the public will not get the competitive conditions to which it is entitled if the Pullman Company and the manufacturing organization from whom it has bought all its cars for many years remain locked in common ownership and direction. In so concluding we do not for a moment attribute to the parties before us lack of good faith in the acceptance of the court's judgment. We do think, however, that if we had adopted the defendants' suggestion we would have left in existence a condition which has been the source of much of the trouble and invite the probability of its repetition. There must, therefore, be what counsel for the defendants aptly characterizes as a divorce-ment.

"We are equally clear, however, that the public interest does not require that the court make the choice for Pullman, Inc., as to which one of its present two businesses it shall continue to own and operate. Separation is not an end in itself; it is a means to provide an open market. Counsel for the government has not given us, in their able brief, convincing arguments why the public interest requires a disposition of the manufacturing business instead of the service business. They have stressed with some force that the retention of the service business would be better for the interests of the shareholders of Pullman, Inc.

**A Problem for the Owners**—"With regard to that point, the court thinks that the problem what is for the best interests of the owners can well be settled by the owners themselves, whose money is invested in the enterprise. The object to be accomplished by the court's judgment is remedial, not punitive. Separation is a necessary element in the remedy. But there is no reason, in protection of the public interest, why the separation needs to be made more difficult than necessary for the defendants nor against their judgment of what is in their best interests.

"The defendants should have a reasonable time, say three months, to explore the possibilities and provide a plan for the separation. They should have an additional period, perhaps a year, to effect it. If they cannot accomplish it by that time, the court will have to order it done by such means as its ingenuity may devise. But defendants

should have opportunity to try it themselves first.

"With regard to the other points in the judgment, there is only one matter which we think requires comment. Since a separation is to be effected and since the Pullman Company and Pullman-Standard will not only be separate entities in law but owned separately in fact, we see no reason why Pullman's future purchases of cars need be subjected to rules of competitive bidding.

"The other provisions of the judgment may, we think, be worked out between the parties. The draft submitted by the government may be taken, except for the points above discussed, as a basis. If the parties are unable in the light of this opinion to agree upon the form of the judgment the court will, upon being advised of their inability, settle the form."

### Pacific Northwest Board Meeting

The Pacific Northwest Advisory Board will hold its next regular meeting in Portland, Ore., on March 23. Meetings of the Executive, the Freight Loss and Damage, the Railroad contact and the Transportation committees will be held on March 22.

### 28,708 Freight Cars, 773 Locos. Installed in 1943

Class I railroads put 28,708 freight cars and 773 locomotives in service in 1943, according to the Association of American Railroads. This was the smallest number of cars installed since 1940, but the greatest number of locomotives since 1930. In 1942 the railroads put 63,009 new freight cars and 712 new locomotives in service.

Of the new freight cars installed in the past calendar year, there were 1,923 plain box, 356 automobile, 8,792 gondolas, 15,137 hopper, 2,446 flat, four refrigerator, three stock, and 47 miscellaneous cars. The new locomotives included 429 steam, 15 electric, and 329 Diesel-electric, compared with 308 steam and 404 electric and Diesel-electric in 1942.

Class I railroads on January 1, had 35,737 new freight cars on order. On the same date last year they had 27,061 on order. The former total included 10,944 plain box, 3,508 automobile box, 4,869 gondolas, 13,651 hoppers, 1,200 refrigerator, 200 stock, and 1,365 flat cars. Railroads also had 955 locomotives on order on January 1,

this year, which included 339 steam, three electric, and 613 Diesel-electric locomotives. On January 1, 1943, they had 888 locomotives on order which included 355 steam and 533 electric and Diesel-electric.

The Office of Defense Transportation also reported 33 new locomotives on order on January 1, and 31 new locomotives installed in the year 1943 by other than Class I carriers. This brings the total of new locomotives on order on January 1, to 988 and the number installed in 1943 to 804.

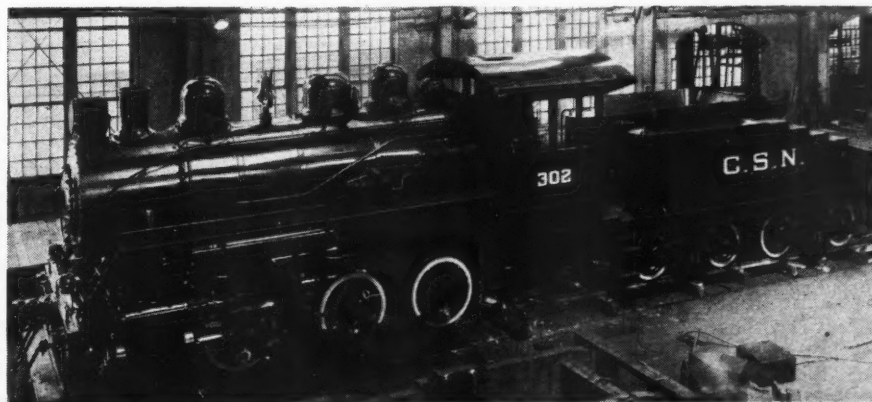
### I. C. C. Service Orders Based on O. D. T. "Certification"

Effective January 20, the Interstate Commerce Commission amended its Service Orders Nos. 92, 99, and 110 to provide that certain War Department freight should be exempt from the authority of the commission's agents under the original orders to divert certain traffic in order to prevent delays in car movement. These amendments were issued "pursuant to Certificate of Preference and Priority in Transportation No. 2, dated January 19, 1944, by Joseph B. Eastman, director of the Office of Defense Transportation to this commission, under authority of Executive Order No. 8989 of December 18, 1941, and the mandatory provisions of section 1, paragraph (15) of the Interstate Commerce Act."

Previous service orders have been issued "at the request of the Office of Defense Transportation," where that agency has been involved. The first departure from this practice was in the diversion of box cars to Canada for the movement of grain into this country upon certification originating in the War Food Administration, but in that case, as was reported in *Railway Age* of January 22, page 249, doubt arose as to the commission's authority, and "voluntary" arrangements were worked out to avoid issuing a service order, although certification had been made by the W. F. A., the War Production Board, and the O. D. T.

**Army Preference**—The exemption of certain War Department freight from the commission's agent's authority to order diversions, contained in Amendment No. 2 to Service Order No. 92 and Amendment No. 1 to orders Nos. 99 and 110, was effected through the inclusion of a pro-

\* \* \* \*



### H. K. Porter Locomotives Shipped to Brazil

Nine of these steam switching locomotives of various types are being built for the National Steel Company of Brazil by the Porter Company.

vision "that preference and priority in transportation be afforded to that carload freight traffic of the War Department which moves under symbols MTX, MI, or GS, to the extent that such carload traffic shall not be subject to diversion by the commission's agent."

By amendment No. 5 to Service Order No. 104, effective January 23, the commission has limited the use of westbound empty refrigerator cars in lieu of box cars to shipments originating at origin points specified in Agent L. E. Kipp's tariffs, I. C. C. No. 1492 and 1493, or at points in Utah.

The commission, "good cause appearing therefor," has vacated and set aside, effective January 21, its Service Orders Nos. 140 and 141, under which the Atchison, Topeka & Santa Fe and Union Pacific were authorized as a wartime measure to operate trains on certain lines, principally in California, without regard to union train-limit agreements. The commission's action was made effective through Service Orders. Nos. 140-A and 141-A.

### I. C. C. Accounting Order

The Interstate Commerce Commission has made public a January 8 order prescribing further modifications in the Accounting Classification. The order permits the modifications to be made effective as of January 1.

Included among the changes is a new revenue and expense instruction with respect to unaudited items affecting operating accounts. It reads as follows: "Any change in the carrier's practice of accounting for accruals or any unusual accruals involving a substantial amount shall be reported promptly to the commission. Accruals shall not be provided for purely speculative items, but shall be limited to reasonable estimates based upon reliable information of amounts representing transactions that will be consummated."

The order also prescribes a new balance sheet account, 779, Accrued Depreciation—Leased Property, in which to lodge accrued depreciation for leased property in cases where settlements are not made currently.

### Club Meetings

R. W. Brown, president, Lehigh Valley, will speak at the 8 p. m., February 17, meeting of the New York Railroad Club, in the Engineering Societies building, 33 West 39th Street. He will have as his theme "The Railroads Can Do It."

The Car Foremen's Association of Chicago will next meet February 14, at 8 p. m., in the LaSalle Hotel. R. A. Burke, assistant vice-president operation, Mather Stock Car Company, Chicago, will present a paper on proposed changes in the A. A. R. rules of interchange effective January 1, 1945.

The February 28 meeting of the Toronto Railway Club, to be held in the Royal York Hotel, at 8:30 p. m., has been slated as "Ladies' Night."

E. J. Davis, assistant car foreman, Great Northern, will have as his topic proposed changes in A. A. R. rules, at the February 7 meeting of the Northwest Car Men's Association. This will be held at 8 p. m., in the Midway Club, 1931 University avenue, St. Paul.

The Car Foremen's Association of Omaha, Council Bluffs and South Omaha Interchange will meet in the Chicago Great Western freight house, Council Bluffs, Iowa February 10, at 1:30 p. m.

### Freight Car Loadings

Loadings of revenue freight for the week ended January 22 totaled 798,722 cars, the Association of American Railroads announced on January 27. This was an increase of 18,502 cars or 2.4 per cent above the preceding week, an increase of 95,428 cars or 13.6 per cent above the corresponding week last year, and a decrease of 19,359 cars or 2.4 per cent below the comparable 1942 week.

Loading of revenue freight for the week ended January 15 totaled 780,220 cars, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading			
For the Week Ended Saturday, January 15			
District	1944	1943	1942
Eastern .....	153,424	144,610	173,537
Allegheny .....	173,041	158,976	174,653
Poahontas .....	56,785	54,028	51,457
Southern .....	118,558	122,219	126,139
Northwestern .....	90,370	82,320	98,866
Central Western .....	124,093	122,706	126,558
Southwestern .....	63,949	70,639	60,117
Total Western Districts .....	780,412	755,665	811,327
Total All Roads....	780,220	755,498	811,327
Commodities			
Grain and grain products .....	57,442	53,307	45,737
Live stock .....	17,167	14,572	13,825
Coal .....	183,886	165,815	174,119
Coke .....	15,445	15,314	14,900
Forest products .....	37,828	42,374	44,114
Ore .....	13,404	14,365	12,896
Merchandise l.c.l. ....	98,888	86,692	146,697
Miscellaneous .....	356,160	363,059	359,039
January 15 .....	780,220	755,498	811,327
January 8 .....	762,999	717,176	736,972
January 1 .....	643,474	621,173	676,534
December 25 .....	641,368	591,471	606,502
December 18 .....	759,288	743,061	798,868

Cumulative Total,  
3 Weeks ..... 2,186,693 2,093,847 2,224,833

In Canada.—Carloadings for the week ended January 15 totaled 67,477 compared with 61,489 for the previous week and 60,924 for the corresponding period last year, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada		
Jan. 15, 1944 .....	67,477	35,623
Jan. 8, 1944 .....	61,581	33,365
Jan. 1, 1944 .....	48,598	33,158
Jan. 16, 1943 .....	60,924	34,363
Cumulative Totals for Canada		
Jan. 15, 1944 .....	129,058	68,988
Jan. 16, 1943 .....	117,478	65,162
Jan. 17, 1942 .....	120,003	56,718

### Transverse Fissure Cause of Passenger Derailment

The derailment at Seals, Ga., on December 12, 1943, of the Seaboard Air Line's Florida-New York train, "The Sun Queen," was the result of a broken rail caused by a transverse fissure, according to the report of the investigation made under the direction of Commissioner Patterson by the Interstate Commerce Commission. Two passengers were killed and 29 passengers and 7 employees were injured.

Seals is located on the road's main line

41.5 miles north of Jacksonville, Fla. At that point the line is tangent, practically level, single track, protected by automatic block signals. The track structure consisted of 100-lb. rail laid new in January, 1931, on 22 treated ties per rail length, fully tie-plated, single-spiked, and fitted with 4-hole angle bars and 8 rail anchors per rail length. No defect had been found when the track in that section was inspected from a motor car on the previous day, nor when a detector car was operated over it on May 3, 1943.

After the accident, the rail was found broken in 10 places, at 8 of which transverse fissures had developed. While none of these extended to the surface, the one which was assumed to have been responsible for the accident involved about 80 per cent of the cross-sectional area of the rail head.

The train involved, No. 108, was made up of a 3-unit Diesel-electric locomotive and 14 passenger train cars of steel construction. The accident occurred about 8:40 p. m. while the train was moving about 75 m. p. h. The engine and the first car remained on the track, and came to a stop about 2,100 ft. beyond the point of derailment. The second and third cars also remained on the track, but were separated about 1,000 ft. from the first car. The fourth car also remained coupled to the third, but it was derailed. The fifth to thirteenth cars, inclusive, were derailed, and came to rest in various positions on the track or the adjacent roadbed. The fourth to eleventh cars, inclusive, were badly damaged.

### Broad Permit for Lessor of Deck Scows

Contract water carriers furnishing non-self-propelled deck scows to persons other than carriers subject to the Interstate Commerce Act are entitled to permits without limitation as to the territory in which such vessels may be used by the hirer. The Interstate Commerce Commission has so ruled in a report on reargument in No. W-92, C. F. Harms Company Contract Carrier Application.

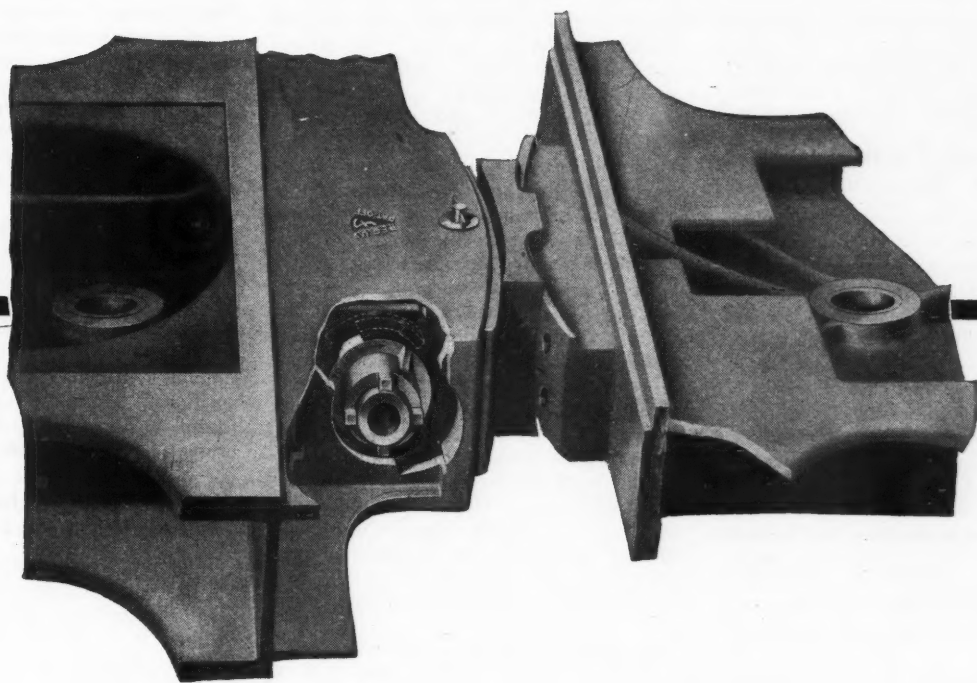
The ruling modifies the previous report of Division 4 which had granted Harms a permit under Part III's "grandfather" clause covering operations in the furnishing of vessels to persons other than carriers to be used by such persons for the transportation of their own property between points in the area defined in Ex Parte No. 140 as the limits of New York harbor and harbors contiguous thereto. In removing the territorial restriction, the commission accepted as "well grounded," the applicant's contention that its case was different from that of the common carrier which itself determines the extent of its operations and the services it will render.

Harms conceded that its vessels had not been used since 1936 outside the territorial limits fixed by Division 4; but the applicant nevertheless insisted that on the grandfather date, January 1, 1940, and continuously since it has "held itself out to hire its vessels to anyone for any use for which they were suited without limitation as to the commodities to be transported or the place or places to which they were to be moved." The applicant further contended



# THE MAJOR RAILROADS

## HAVE A TYPE E RADIAL BUFFER APPLICATION PROGRAM



**A**S factual evidence of the improvement in riding qualities and reduction in locomotive vibration, shake and vibration recorders show that Franklin Radial Buffers reduce the vertical bounce by 50%, decrease the horizontal shake by 66%, and cut the acceleration of the vertical bounce by some 62%. But the evidence that promises to speed the trend to the Franklin Radial Buffer with ever increasing rapidity, is to be found in the records of reduced maintenance in all related parts. There is reduced wear on chafing plates, drawbars and pins, fewer pipe failures, less displaced brickwork, and fewer loose cabs. Smooth riding means something more than just increased comfort — it means lower maintenance and increased availability.



**FRANKLIN RAILWAY SUPPLY COMPANY, INC.**

NEW YORK  
CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

January 29, 1944

that the territorial limitation "restricts its business materially and prevents it from continuing the operations in which it was engaged. . . ."

The modified permit does stipulate, however, that the operations are to be conducted at "New York, N. Y.," thus preventing applicant from establishing a business office at another location.

Commissioner Porter, dissenting, complained that the majority had departed from the principle that carrier grandfather rights should be determined by the territorial scope of previous operations. He was not impressed with the requirement that Harms continue to maintain its office at New York. "We are not authorized to determine where a carrier shall maintain its offices," Mr. Porter said. Commissioners Miller and Rogers subscribed to his views, while Commissioner Aitchison did not participate in the disposition of the proceeding.

### Women Prove Their Ability at Train Announcing

The Pennsylvania has installed a public address system in Pennsylvania Station, New York, and changes in train schedules and special messages are now being announced regularly by male and female voices, selected and trained especially for this function.

The railroad engaged the School of Radio Technique, Radio City, New York, to instruct 25 men and women for the announcing jobs. John F. Gilbert, director of the school, and Eugene H. King, faculty member, as well as the production supervisor of Radio Station WOR, have spent several weeks coaching their pupils how best to use the address system, as well as to encourage good humor on the part of passengers as to impart information on trains.

Contrary to popular prejudice against female voices on the air, the women announcers in Penn station are reported to

be carrying off the honors. Mr. Gilbert attributes this to a law of acoustics and the fact that women's voices are an octave higher than men's.

The low-pitched male voice, so effective on the radio, picks up echoes in the large spaces of the station concourse, and is apt to go into the microphone pleasant enough, but come out a bad-tempered, not too intelligible growl. Women's voices, on the other hand, if pitched properly and with words adequately spaced, come out clear, friendly and understandable, though men can sound well, too, the director explained, if they are trained to use a high, clear pitch.

### A.R.M.E.A. Meets by Mail

Cancelling its annual convention because of the "present emergency," the American Railway Magazine Editor's Association has instead released a handsomely set-up 20-page brochure, entitled "Convention by Mail."

Generously illustrated with line drawings, the booklet includes a variety of features, a message from Ernest Black, A. R. M. E. A. president, several committee reports, a treasurer's report and a "parade" of personal mentions.

In the first feature article, "C'est La Guerre . . . and the Editor," Harry Walker, contributing for his paper, the Rio Grande "Green Light," suggests that "Certainly nothing should be allowed to interfere with the exchange of ideas during the wartime metamorphosis which industrial house organs are now undergoing." He discusses the training of correspondents, observing that the "Green Light" "bends over backwards to give credit for outstanding news gathering." His staff, he reports, is now "in the swing of the new wartime coverage."

Ted O'Meara, editor of the Chesapeake & Ohio's "Tracks," writes that "left at home" have betn: "Winning the war with words" . . . riding crowded trains . . .

preaching . . . praying . . . buying bonds, paying taxes . . . going bald."

The "Cornstalk Philosopher," Harry B. Robertson, editor of the Illinois Central's magazine, reports that "Railroad publications have made the change-over from peacetime to wartime production in a manner befitting the far-sighted editorial policy which directs all well-managed magazines and newspapers."

"So that every worker on every part of the vast railroad network, 'America's Life-line,' may know how best to play his part in helping to win the war, railroad magazines and newspapers are devoting all their energies to furthering wartime objectives adopted by the Association following Pearl Harbor," contributes Page N. Price, assistant editor, Norfolk & Western Magazine, in her feature, "Through the Years . . . from 1921 to 1943."

Mention is made of the "pony" edition of the Pennsylvanias "Mutual Magazine," sent to P. R. R. boys in the armed forces. This is discussed by J. R. Mecouch, editor of the paper.

L. D. Hale, Atlanta & West Point Railroad, who has included an article "From Woodburners to Streamliners," is of the opinion that railroad publication editing "is an important job and should be considered so by the Interstate Commerce Commission in its classification of railroad positions." He suggests that A. R. M. E. A. formulate a resolution requesting that the present I. C. C. classification be revised.

### Porter Cites "Absurd Results" of Refiners Case Rule

Interstate Commerce Commissioner Porter has satisfied himself that the "absurd results" which he anticipated have begun to flow from the so-called Refiners case decision wherein the commission majority held that the Union Tank Car Company, non-carrier parent corporation of Refiners Transport & Terminal Corp., would have to become a party to the latter's application for authority to acquire operating rights and property of another motor carrier.

Mr. Porter's "I told you so" expression came in his dissent to Division 4's January 12 report in No. MC-F-2332, which authorizes the Burlington Transportation Company to purchase for \$300 the bus-operating rights of its parent railroad, the Chicago, Burlington & Quincy, between Minnekahta, S. D., and Hot Springs. Conceding that the "result is worse than silly," but insisting nevertheless that "it is the natural result of a bad decision," he contended that the Refiners case precedent requires that the Great Northern and Northern Pacific, which control the Burlington, must become parties to the present proceeding, else the application must be dismissed.

**Mahaffie Answers**—The foregoing is based on Mr. Porter's understanding of the Refiners case decision (see *Railway Age* of August 21, 1943, page 322) as one which held that Refiners' application must be dismissed because Union Tank "was a necessary party, and had not joined in the application." He went on to point out that although the decision has been reversed by a three-judge United States District



Photo by Erich Kastan

### Feminine Train Announcer Demonstrates Her Skill

Station Master Tom Hawks is next to announcer and Instructors Eugene H. King and John F. Gilbert are to his left.



Court for the District of Maryland, "we have continued, as a division, to follow the action of the commission, pending an appeal to the Supreme Court."

"In the Refiners case," Mr. Porter added, "the commission in holding that Union should be made a party, did not go beyond the control of Union, but if that decision means anything, surely it is that having started to ascend the genealogical tree, we should climb until the branches are so disbursed that no one, or more acting together, has control."

A separate concurring expression from Commissioner Mahaffie undertook to answer Commissioner Porter's dissent. The decision in the Refiners case, Mr. Mahaffie said, was based on that portion of the Interstate Commerce Act's section 5(2) (a) relating to acquisition of control by "a person which is not a carrier"; and he quoted from the majority opinion of the three-judge court which had thus defined the issue. "In the instant case," Mr. Mahaffie went on, "no such question is involved; both the Great Northern and Northern Pacific are 'carriers' as defined by the act."

### Reopens Case Involving Coal Rates to New York Piers

The Interstate Commerce Commission has reopened, for reconsideration on the record as made, the No. 27766 proceeding wherein its recent five-to-four decision dismissed a complaint alleging that rates on anthracite coal from mining regions in Pennsylvania to tidewater piers in New Jersey for transshipment are unreasonable.

Complainants are "40 corporations and one individual" whose shipments "aggregate more than two-thirds of the annual output of Pennsylvania anthracite." The commission's previous report was noted in the *Railway Age* of October 30, 1943, page 700.

### Employee Annuity Rolls Increase

Employee-annuity rolls of the Railroad Retirement Board increased by an average of 745 annuities a month in the first five months of the fiscal year ending June 30, 1944, compared with 539 annuities a month for the same period in the previous year, according to the December Review of the Board. At the end of November, 135,000 annuities were in force.

Lump-sum death benefits certified during the month numbered 1,170, with an average payment of \$369.88. The average employee-annuity paid was \$66.27, and the average pension was \$59.06. Survivor annuities averaged \$31.86, and death-benefit annuities, \$35.46.

**Fills 38,300 Jobs**—Job placements for November totaled 38,300, exceeding the former record by almost 1,700. Orders, openings, and referrals for the month also established new records and numbered 5,160, 46,000, and 57,100, respectively. Interregional placements fell off somewhat, from 1,670 in October to 1,390 in November. These placements were mainly for track, shop laborer, helper, and train-and-engine-service work.

Personnel needs for the railroad indus-

# THINK WHAT YOU'RE DOING — WHEN YOU'RE DOING IT



HEAVY, HEAVY HANGS OVER THY HEAD

STAND CLEAR AND BE SAFE

## A WORD TO THE WISE IS SUFFICIENT

Poster No. 246, the February, 1944, installment of the "All The Year-Every Year Safety Program," Is Now Being Distributed by the Committee on Education, Association of American Railroads.

\* \* \* \*

try as of November 1 were estimated at 117,000. The November increase continued the upward movement observed in every month this year except July, but at a slower pace than in the last few months. On September 1 the increase over the preceding month's estimate was 16 per cent; on October 1 it was 8 per cent; but on November 1 it was only 1 per cent.

Board determinations of various issues in the administration of the Railroad Retirement acts were upheld recently in a decision rendered by a United States District Court. The points concerned included the earliest date that a joint-and-survivor annuity elected under the 1937 act may begin to accrue; when an annuity should be adjudicated under the 1935 act rather than under the 1937 act; and the exercise of the Board's judgment in not departing from the 1924-31 base period to determine an individual's "monthly compensation" for service rendered prior to January 1, 1937.

**Death Benefits for Non-Annuitants**—Lump-sum death benefits constitute the

largest proportion of the survivor payments made by the Board. In the fiscal year 1942-43 they accounted for 92 per cent of all survivor benefits certified, and numbered 14,843. In only 430 of these cases had the employee already been certified for an annuity.

Excluding annuitants, the average age at death of the individuals with respect to whom lump-sum death benefits were certified was 51.7. Most of them, however, were in the 55-59 age group. The average employee had worked 54 months after December, 1936, had earned \$148 a month, and left a benefit of \$342. The maximum was attained by those in the 65-69 age group, with service months after 1936 averaging 65, earnings \$173, and benefits \$459. Of the benefits certified in 1942-43, almost half were over \$350 and, for the first time, a few were as high as \$900.

Claims for unemployment insurance have remained near 2,000 for each month of this benefit year, although employment on class I railroads declined 27,000 from mid-July to mid-November. November claims,

# 25 MORE LIMAS



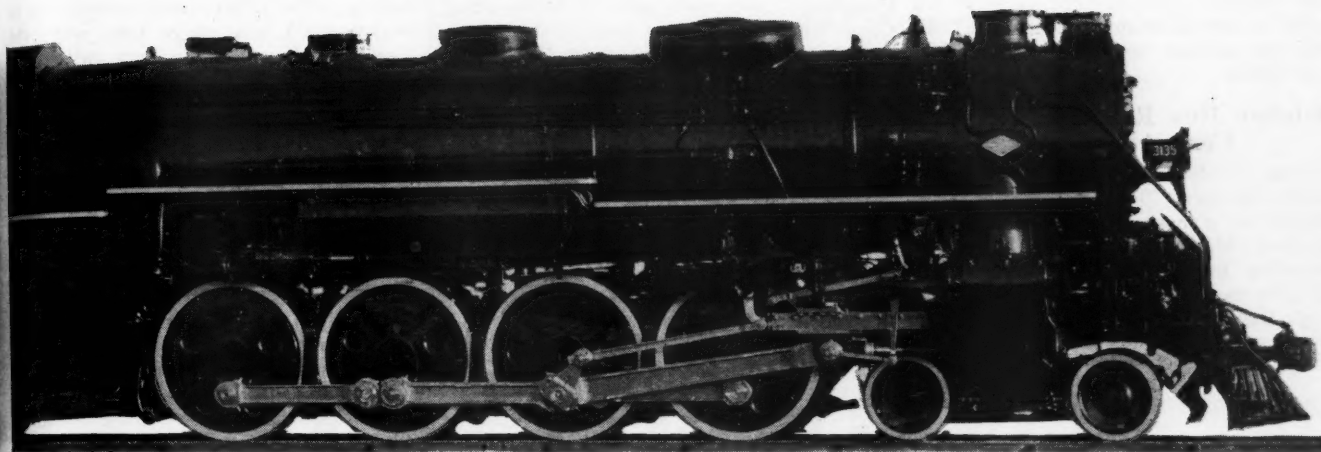
## LOCOMOTIVE CHARACTERISTICS

Weight on Drivers.....	266,500 Lbs.
Weight of Engine.....	401,100 Lbs.
Cylinders (2).....	26 x 30 Ins.
Diameter of Drivers.....	72 Ins.
Boiler Pressure.....	250 Lbs.
Tender Capacity (fuel).....	42 Tons
Tender Capacity (water).....	15,200 U. S. Gals.

LIMA LOCOMOTIVE WORKS, I



# **Speed war traffic**



***on the***

## **NEW YORK CENTRAL**

Just in time to play their part in helping to speed the heaviest traffic this great system has ever handled, these 25 new Lima-built super-power steam locomotives have now gone into service. They join the 25 Class L-4a Limas delivered to this road in 1943, and the 15 Class L-3b Limas delivered in 1940. Their speed and high tractive power fit them particularly for general service under today's operating conditions.

**INCORPORATED, LIMA, OHIO**

numbering 2,110, were a little higher than those for the other four months of the benefit year, but still did not reflect the usual seasonal unemployment.

Applications for certificate of benefit rights were received from 490 unemployed workers during the month, nearly half of them from the New York and Atlanta regions. Benefit certifications for November numbered 1,510, and amounted to less than \$40,000. The average payment for initial periods of unemployment was \$19.47, and the average for subsequent periods was \$28.60.

## October Bus Revenues 22.7 Per Cent Above 1942

Class I motor carriers of passengers reported October, 1943, revenues of \$32,-408,654, as compared with \$26,406,226 in October, 1942, an increase of 22.7 per cent, according to the latest compilation prepared by the Interstate Commerce Commission's Bureau of Transport Economics and

the double-track Cajon pass line of the Santa Fe, over which Union Pacific trains also are operated. The track was tangent at that point. In that territory the current of traffic was to the left, and train operations with the current of traffic were controlled by automatic block signals, their indications superseding timetable superiority.

The Union Pacific train, First No. 208, eastbound, was made up of 2 locomotives and 16 passenger train cars of steel construction. It was moving about 25 m. p. h. on a 2.2 per cent ascending grade, having passed a signal displaying the medium speed aspect—that is, proceed, approaching the next signal prepared to proceed at restricted speed—when the eighth car, a diner, was struck in the side by the Santa Fe locomotive, moving westbound at about 15 m. p. h., which had entered a crossover placed facing-point for movements from the westbound to the eastbound track.

The light locomotive and the seventh to

of Extra 3863, who explained that in the dark he thought the siding switch operated the derail and that the second switch, some 14 ft. beyond, was for movement from the siding into the main track.

At this point, the derail on the siding was so connected with the siding switch that when the switch was lined for movement into the main track the derail moved in conjunction with it into the non-derail position. The siding switch stand was of the low-stand, hand-throw type, while the stand controlling the crossover switch was of the high-stand, hand-throw type. Both switch stands were located on the south side of the westward (left hand) main track.

The report pointed out that the fireman handling the switches, whose "entire railroad experience covered only about 6 months," was not aware that a crossover was located in the vicinity, and that he had "never been instructed regarding the manner in which derails operated in conjunction with siding switches." If the switches involved had been equipped with electric switch-locking, it went on to say, it would not have been possible to line the crossover switch for the locomotive to enter it when a train was moving in the vicinity on the eastward main track.

## Associated Traffic Clubs to Meet February 24

The Associated Traffic Clubs of America will hold their twenty-second annual meeting at Cleveland, Ohio, on February 24. The meeting will be dedicated to the Office of Defense Transportation and honors will be conferred upon Joseph B. Eastman, director of the office, who, on February 17 will have rounded out 25 years of service as a member of the Interstate Commerce Commission. Speakers for the occasion include W. M. Jeffers, president of the Union Pacific; John B. Keeler, president

	Passenger revenue		Passengers carried	
	October 1943	October 1942	October 1943	October 1942
New England Region .....	\$1,342,827	\$1,409,729	\$3,851,055	\$3,678,288
Middle Atlantic Region .....	3,151,860	2,785,471	6,695,773	5,584,781
Central Region .....	4,665,337	3,656,915	8,345,825	6,077,503
Southern Region .....	8,930,642	7,292,010	13,365,812	9,889,448
Northwestern Region .....	885,298	694,954	766,819	562,997
Mid Western Region .....	2,993,134	2,257,147	2,367,452	1,778,528
Southwestern Region .....	5,570,907	4,418,158	7,494,989	5,608,864
Rocky Mountain Region .....	445,720	315,085	325,129	202,060
Pacific Region .....	4,422,929	3,576,757	5,714,336	4,305,637

Statistics from 172 reports representing 177 bus operators. Passengers carried increased 29.8 per cent, from 37,688,106 to 48,927,190.

The breakdown by regions of the bus revenue and traffic figures, which exclude data on charter or special party service, is given in the accompanying table.

## More Time for Replies to No. 28310 Exceptions

The Interstate Commerce Commission has further extended from March 1 until March 15 the time within which it will receive replies to exceptions to the examiners' proposed report in the No. 28310 investigation of the Consolidated Freight Classification. As noted in the *Railway Age* of January 8, page 173, the exceptions are due February 15.

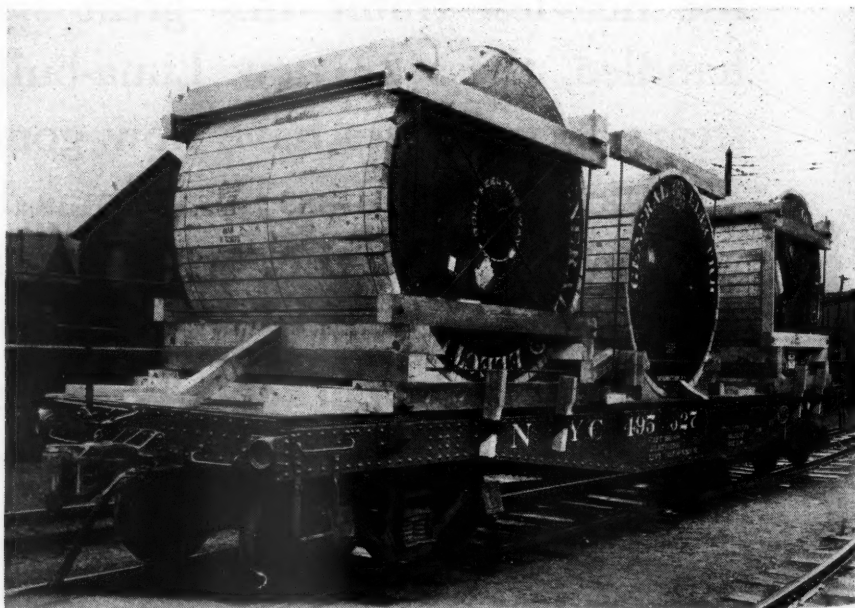
## Accident Ascribed to Help of Limited Experience

A collision on joint track at Devore, Calif., on November 26, 1943, in which a light Atchison, Topeka & Santa Fe locomotive struck the side of a Union Pacific passenger train, causing the injury of 33 passengers and 16 employees, resulted from the inexperience of an employee, but could have been prevented, according to the report prepared by the Interstate Commerce Commission, by the installation of electric switch locking at main track hand-operated switches in automatic block signal territory. The report, prepared under the supervision of Commissioner Patterson, concluded with the recommendation that the road make such installations.

The accident occurred at a point 10.4 miles north of San Bernardino, Calif., on

tenth cars, inclusive, of the passenger train, were derailed and considerably damaged. The accident occurred about 9:55 p. m. The Santa Fe locomotive had just moved into the westward main track from a parallel passing track, having run around Extra 3863 West, when the crossover switch was lined for movement into the eastward track immediately in front of it. The switches were thrown by the fireman

\* \* \* \*



## Specially Constructed Cradles Solve Shipping Problem

Special cradles to take care of end thrust and side sway were designed by the General Electric Company to ship the above reels of cable which weigh 47,855 lb. each.





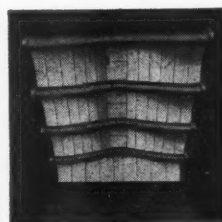
# ***“Tailor Made”*** **YET STANDARDIZED!**

Each Security Arch is “tailor made” to suit the individual class of power in which it must function. But so effectively is Security Arch Brick standardized that only six different Security Arch Brick patterns are needed for more than 50% of the Security Arch Brick used.

This high standardization reflects the engineering and experience of the American Arch Company.

It simplifies the application of the brick arch and saves the stores department a vast amount of trouble.

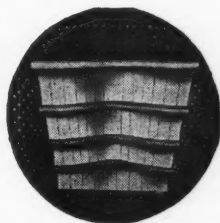
This foresight of the American Arch Company in adhering to standards is but one of the many ways in which the American Arch Company is serving the railroads.



*There's More to  
SECURITY ARCHES  
Than Just Brick*

**HARBISON-WALKER  
REFRACTORIES CO.**

***Refractory Specialists***



**AMERICAN ARCH CO.  
INCORPORATED**

60 EAST 42nd STREET, NEW YORK, N. Y.

***Locomotive Combustion  
Specialists***

January 29, 1944

32

of the National Industrial Traffic League; Lachlan Macleay, president of the Mississippi River System Carriers Association, and Chester G. Moore, chairman and general manager of the Central Motor Freight Association, Inc.

Meetings of the board of directors, the council of club presidents, the national committee on education and research and the committee on club publications and a special luncheon in honor of the council of club presidents will be held on February 23.

### Forwarder Revenues in 1942

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' first summary of statistics compiled from annual reports of freight forwarders reporting to the commission. The data cover the year ended December 31, 1942.

The summary table shows that all reporting forwarders had a 1942 gross revenue of \$162,631,210 out of which they paid the carriers \$130,116,398 for transportation purchased. The net after operating expenses and taxes, other than income taxes, was \$3,232,482.

**Earnings of the Big 3**—The breakdown of the total shows that the three largest forwarders—Acme Fast Freight, Inc., National Carloading Corporation, and Universal Carloading & Distributing Company—accounted for \$128,837,275 or 79.4 per cent of the 1942 gross reported by all forwarders. The gross of those three companies was: Acme, \$38,914,284; National, \$43,166,988; Universal, \$46,756,003.

The net income after all taxes for Acme was \$281,483; for National, \$221,868; and for Universal, \$1,074,730—"the last having no federal income tax deduction, the income tax being assumed by the United States Freight Company, the parent company."

The Bureau's compilation was based on reports containing "complete information" from 76 forwarders, 51 having annual gross revenues of \$100,000 or more and 25 less than \$100,000. Reports with "incomplete information" were received from 47 forwarders but, in the aggregate, these were of minor importance."

### Broader Exemption for Bulk Carrier on Lakes

Modifying previous findings of Division 4, the Interstate Commerce Commission now holds that a Great Lakes water carrier engaged in the transportation of bulk commodities was not a common carrier subject to the Intercoastal Shipping Act of 1933, as amended, whether the bulk traffic is carried in full cargo lots for one shipper or for two or more shippers in the same vessel at the same time. Thus section 303(b) of the Interstate Commerce Act exempts from regulation all operations of such a carrier in the transportation of bulk commodities, provided cargo space is being used "for the carrying of not more than three such commodities."

The commission's decision is a report on reargument in the No. W-773 proceeding, involving operations of Columbia Transportation Company. As noted in the *Railway Age* of April 3, 1943, page 689, Division 4 in granting a certificate authorizing

Columbia's continued operation as a common carrier of commodities generally, held with respect to the bulk traffic that only the transportation of full cargo lots for a single shipper was not subject to the Intercoastal Shipping Act and therefore exempt from I. C. C. regulation.

**Sought Contract Certificate**—Columbia on reargument sought not only the broader exemption for its bulk traffic, but also supported an amended application seeking, in lieu of the common-carrier certificate, a contract-carrier permit covering its other operations. The commission affirmed Division 4's findings that such operations were common carriage, and it also rejected contentions of intervenors that common-carrier certificate should be more restricted than one authorizing transportation of "commodities generally."

In making its finding that none of Columbia's bulk traffic had been subject to the Intercoastal Shipping Act, the commission pointed out that the United States Maritime Commission had never asserted authority over such transportation, and proceeded to express its own view that such transportation was private carriage at common law where it was necessary to look in the absence of a definition of a "common carrier" in the Intercoastal Shipping Act.

**Separate Expressions**—Commissioner Alldredge, concurring, said the majority report left undetermined the "main issue," i. e., the contention of protestants that the certificate should not be so broad as to authorize the transportation of "commodities generally." He nevertheless concurred, because he thinks the meaning of that phrase should be determined in "an appropriate proceeding," and made "to apply uniformly to all outstanding certificates and not merely to the one here under consideration." Chairman Patterson, dissenting-in-part, would have restricted Columbia's certificate to the transportation of commodities named in its application.

Commissioner Porter, dissenting, disagreed with the bulk-traffic phase of the decision, and Commissioner Johnson subscribed to his view. Commenting on that part of the majority report which relied on the fact that the Maritime Commission had never asserted jurisdiction over the Great Lakes carriers, Mr. Porter suggested that if the I. C. C. were to hold that it has no jurisdiction over certain questions because it has never passed on them, it might "do violence to the act as a whole."

### Representation of Employees

The National Mediation Board has closed without certification the case involving a dispute as to what organization may represent yardmasters of the Denver & Rio Grande Western. In a recent election none of the three contestants—the Switchmen's Union of North America, the Brotherhood of Railroad Trainmen, and the Railroad Yardmasters of America—received a majority of the legal votes cast. Prior to the election, the employees involved had been represented by the B. of R. T.

In other recent elections the Brotherhood of Railroad Signalmen supplanted the Atlantic Coast Line Signalmen's Association as the representative of A. C. L. signal

department employees; while the American Railway Supervisors Association, Inc., won the right to represent the Ann Arbor's mechanical department foremen or supervisors of mechanics.

### "400s" Run 3,066,453 Miles in Two Years

The five units comprising the streamliner "400" fleet of the Chicago & North Western have traveled a total of 3,066,453 miles during their two years of wartime service ending January 12. In the last year, the 5 power units and 25 streamlined cars covered 1,347,166 miles, averaging more than 738 miles per day, seven days a week, for each power unit on regular scheduled runs.

### Commutation Fare Cases

The Interstate Commerce Commission has discontinued its Nos. 28973 and 28975 proceedings involving, respectively, interstate commutation fares in New York and in the Philadelphia-Camden district. In another order the commission has granted a New York, New Haven & Hartford petition and broadened No. 28972, Interstate Commutation Fares—New England, to include the New Haven's interstate commutation fares between points in Connecticut and points in New York, including New York City.

### The New York Central's "Housewife"

With a "family" of 400 or more women under her jurisdiction, who have been employed on the Michigan Central since the war started to replace men who have entered the armed forces, Mrs. Isobel J. Masters, service inspector of female employees of the New York Central, with jurisdiction extending from Niles, Mich., to Buffalo, N. Y., has been dubbed the railroad's "housewife" because the designation is more descriptive of her work than her formal title.

In addition to making periodic investigations of all facilities for female employees, she inspects passenger facilities aboard trains to see that cars are properly



Isobel J. Masters



## QUESTION

*Can the Capacity  
of Existing Boilers  
Be Increased?*

## ANSWER

*Yes!—  
BY THE RECLAMATION OF WASTE HEAT—  
with the Elesco Exhaust  
Steam Injector*

A-1631



SUPERHEATERS • FEEDWATER HEATERS  
AMERICAN THROTTLES • STEAM DRYERS  
EXHAUST STEAM INJECTORS • PYROMETERS

THE  
**SUPERHEATER**  
C O M P A N Y

Representative of  
AMERICAN THROTTLE COMPANY, INC.  
60 East 42nd Street, NEW YORK  
122 S. Michigan Blvd., CHICAGO

Montreal, Canada  
THE SUPERHEATER COMPANY, LTD.

cleaned and serviced for water, soap and towels, that dining cars, dining service and kitchens are properly maintained; and that linoleum, carpeting, and furniture are kept in good condition. On the road, she also inspects stations, particularly those where women are employed.

In addition to seeing that quarters used by women employees meet state and federal standards, and that they are as neat and comfortable as possible, she frequently settles differences between employees and sometimes differences between employees and department heads. She teaches new employees to be safety minded, and instructs them on other points of conduct in and about their work.

Mrs. Masters entered the employ of the railroad as a stenographer in the signal-electric department in Detroit, on March 23, 1923, and until April 15, 1928, when she resigned, worked as typist, stenographer, payroll clerk and in drafting work. She returned to the railroad on December 1, 1936, as a typist in the departmental accountants' office, and served in stenographic capacities in various departments until March 24, 1943, when she was appointed service inspector of female employees. She was born in Canada and took up residence in the United States in July, 1923.

## House Gets I.C.C. Appropriation Bill

(Continued from page 289)

transport situation and Director King of the Bureau of Service discussed the commission's wartime activities with respect to car service.

**No Deferments Asked**—It developed from Mr. Bartel's testimony that the commission had 2,141 employees as of October 31, 1943, as compared with 2,483 as of October 31, 1942. Mr. Bartel did not know how many of those who left the commission had gone into the armed services; but he was sure that the commission had asked for no deferments.

Representative Wigglesworth, Republican of Massachusetts, asked Mr. Mahaffie if the commission had any authority with respect to contracts between railroads and independent contractors for maintenance-of-way work. The commissioner recalled that the commission had in the past examined some such contracts, criticizing what it regarded as wasteful practices; but it has "no control over it other than the matter of publicity." Mr. Mahaffie had heard reports of higher wages being paid by such contractors than were paid maintenance workers employed directly by the railroads, but he had no personal knowledge of the situation.

**RRs "Unsung Heroes"**—Discussing railroad accidents with the subcommittee's chairman—Representative Woodrum, Democrat of Virginia—Mr. Mahaffie asserted that "the remarkable thing is that they have not increased more than they have, in view of the way traffic has to be handled at the present time and the amount of traffic. I think, on the whole, that the record is

excellent." Chairman Woodrum agreed, adding "I think they [the railroads] are the unsung heroes of the war." The commissioner told Representative Case, Republican of South Dakota, that the commission had found no evidence of sabotage in its investigations of railroad wrecks.

Later on Representative Dirksen, Republican of Illinois, raised a question as to whether the commission had ever considered imposing fees for some of its inspection work "in connection with the safety of employees, the signal safety systems, locomotive inspection, and possibly motor transport."

Mr. Mahaffie stated that the matter "has been considered at various time," but nothing has been done except the imposition of the \$10 fee for admission of practitioners before the commission, as authorized in the Transportation Act of 1940. Mr. Bartel pointed out that charges are also made for certifications, copies of tariffs, reports, and other public documents on file with the commission; and for certain exhibits and reports prepared in connection with reorganization proceedings.

Representative Wigglesworth was interested in the "dividing line" between the national defense work of the commission and the work of the Office of Defense Transportation. Director King of the Bureau of Service discussed the matter briefly and later filed a detailed memorandum on it.

**\$110,000,000 for Road Adm.**—The bill also carries appropriations totaling \$110,000,000 for the Public Roads Administration, which is \$35,000,000 less than the fiscal 1944 appropriations and \$10,000,000 less than the fiscal 1945 Budget estimate. The \$35,000,000 drop under the current appropriation is a net figure resulting from increases totaling \$15,000,000 in three items and cuts totaling \$50,000,000 in three others.

In other words the \$20,000,000 provided for the strategic highway network is an increase of \$10,000,000, the \$5,000,000 provided for surveys and plans is an increase of \$2,000,000, and \$3,000,000 is provided for secondary and feeder roads which got no fiscal 1944 appropriations. The \$50,000,000 in cuts is the result of a drop from \$75,000,000 to \$40,000,000 in the amount provided for access roads, the lack of an appropriation for the Costa Rica section of the Inter-American highway which got a fiscal 1944 appropriation of \$12,000,000, and a reduction from \$5,000,000 to \$2,000,000 in another Inter-American highway item.

## Michigan Central Shop Chief Named "Safety Ace"

W. E. Buck, superintendent of the locomotive shop of the Michigan Central at Jackson, Mich., was selected as "safety ace" for the week of January 24 by the National Safety Council. Recognition of his record for preventing injuries and deaths among his fellow workers was given on the Council's radio broadcast, Out of the Shadows, on January 24. He also received a \$100 war bond. During the seven years in which he has directed the shop's safety program, there has not been a single fatal accident and injuries have been few.

## Supply Trade

H. B. Lilley, formerly assistant chief inspector engineer, has been appointed sales development engineer by the steel and tube division of the Timken Roller Bearing Company.

Thomas P. Gorter, assistant vice-president of the Pullman-Standard Car Manufacturing Company, Chicago, in charge of the company's Washington, D. C., car sales office, has been elected vice-president.

Ferdinand A. Keihn, eastern representative of the automotive heating and ventilating division of the Evans Products Company, has been appointed manager of the Evans Auto-Railer division to succeed Charles Gross who has resigned.

Harry H. Chapman, manager of the Minneapolis, Minn., office of the Westinghouse Electric & Manufacturing Co. has been appointed manager of the Transportation department with headquarters at East Pittsburgh, Pa., following a reorganization of the Central Station and Trans-



Harry H. Chapman

portation department in which the latter was established as a separate industry department. Mr. Chapman was born in St. Louis, Mo., and was graduated from the University of Illinois in 1919. Shortly after graduation, he entered the employ of Westinghouse as chief clerk in the power and railway division with headquarters in Chicago. Later he was employed in various sales capacities in the company's northwestern district until August, 1936, when he was named manager of the Minneapolis office.

D. I. Packard, assistant western sales manager of the Franklin Railway Supply Company with headquarters at Chicago, has been appointed Chicago district manager of the Baldwin Locomotive Works to succeed Charles Riddell, who has been Chicago district manager since 1905 and who has a record of 61 years continuous service with Baldwin. Mr. Riddell will continue with the Chicago office as special representative. Mr. Packard was born in Granville township, Bradford county, Pa., on November 26, 1894. He entered railway



# how's YOUR quota?



## ...YOUR 4TH WAR LOAN QUOTA

**W**HETHER your plant meets its quota, or fails, lies largely in *your* hands. Your leadership can put it over—but if you haven't already got a smooth running, hard hitting War Loan Organization at work in your plant, there's not a minute to lose.

Take over the active direction of this drive to meet—and break—your plant's quota. And see to it that every one of your associates, from plant superintendent to foreman, goes all-out for Victory!

To meet your plant's quota means that you'll have to hold your present Pay-Roll Deduction Plan payments at their all-time high—plus such additional amounts as your local War Finance Committee has assigned to you. In most cases this will mean the sale of *at least* one \$100 bond per worker. It means having a fast-cracking sales organization, geared to reach personally and effectively every individual in your plant. And it means hammering right along until you've reached a 100% record in those extra \$100—or better—bonds!

And while you're at it, now's a good time to check those special cases—*growing more numerous every day*—where increased family incomes make possible, and imperative, far greater than usual investment through your plant's Pay-Roll Deduction Plan. Indeed, so common are the cases of two, three, or even more, wage-earners in a single family, that you'll do well to forget having ever heard of '10%' as a reasonable investment. Why, for thousands of these 'multiple-income' families 10% or 15% represents but a paltry fraction of an investment which should be running at 25%, 50%, or more!

After the way you've gone at your wartime *production* quotas—and topped them every time—you're certainly not going to let anything stand in the way of your plant's breaking its quota for the 4th War Loan! Particularly since all you are being asked to do is to sell your own people the finest investment in the world—their own share in Victory!

**LET'S ALL  
BACK THE ATTACK!**

*This space contributed to Victory by*  
**AMERICAN LOCOMOTIVE**

This is an official U. S. Treasury advertisement—prepared under auspices of Treasury Department and War Advertising Council.

service in the locomotive shops of the New York Central at Avis, Pa., in May, 1911, and, except for one year in the United States Navy during the world war, served in various capacities in the mechanical department of that railroad until December



**D. I. Packard**

31, 1923. He became associated with the Franklin Railway Supply Company in January, 1924, and served as resident supervisor of manufacturing operations and as plant manager at Baltimore, Md., until September 1, 1936, when he was transferred to the sales department. He was later promoted to assistant western sales manager, and in November, 1942, was granted a leave of absence to assist the War Production Board in arranging for the production of components required for the locomotive construction program. This assignment was terminated on December 15, 1943, so that he could take up his new duties with Baldwin.

Mr. Riddell was born at Allegheny, Pa., on July 4, 1867, and entered the employ of the Baldwin Locomotive Works in October, 1882, as an office boy in the main office of the Standard Steel Works, which was then a branch office of Baldwin. From 1882 to 1896 he served as office boy, stenographer and confidential clerk. From the latter date until 1904 he was Chicago manager of the Standard Steel Works and from 1905 until his recent appointment he has been Chicago district manager of Baldwin.

**Richard W. Corns** has been appointed assistant general traffic manager of the **B. F. Goodrich Company**. Mr. Corns joined the company in 1934 and was a sales analyst until his transfer to the traffic department in July, 1941.

The **American Chain & Cable Co.**, Bridgeport, Conn., has acquired the **Maryland Bolt & Nut Co.**, of Baltimore, Md., manufacturers of a line of bolts, nuts, lag screws and forgings. Operations will be continued at the Baltimore plant as heretofore.

**W. E. Mackley**, manager of sales of the Buffalo, N. Y., office of the **American Steel & Wire Co.**, subsidiary of the United States Steel Corporation, has been appointed manager of the manufacturers sales department of the New York office. **F. E. Ward**, assistant manager of the

manufacturers sales department in New York, has been appointed manager of sales at Buffalo to succeed Mr. Mackley, and **F. L. Nonnenmacher** has been appointed assistant manager in New York to succeed Mr. Ward.

**L. P. McAllister**, metallurgical engineer for the **Lukens Steel Company** since 1936, has been appointed assistant to the general superintendent, and **Joseph G. Althouse**, engineer of tests, has been appointed metallurgical engineer. **William Taylor**, assistant engineer of tests, succeeds Mr. Althouse.

**H. M. Comstock**, assistant to the president of the Clearing Machine Corporation, has been appointed engineering sales representative of the **Kropp Forge Company** in the southern California territory. Mr. Comstock served a year in Washington with the tools division of the War Production Board as chief of the forge and press section.

**Howard A. Flogaus** has been elected vice-president in charge of engineering for the **J. G. Brill Company**. Mr. Flogaus



**Howard A. Flogaus**

began his career with the motor coach industry in 1924 as engineering sales representative for the Skinner Automotive Device Company. He joined the engineering staff of the Yellow Truck & Coach Manufacturing Co. as engine designer in 1930, and was subsequently promoted to the post of new development engineer. He joined the Reo Motor Car Company as chief engineer in charge of coach and truck design in 1937, later advancing to vice-president in charge of engineering and manufacturing. He began his association with the J. G. Brill Company in 1939 as assistant to the vice-president and was subsequently appointed chief engineer of motor coach, trackless trolley and street car design.

At the fifty-sixth annual meeting of the **Dearborn Chemical Company**, Chicago, on January 26, **Robert F. Carr**, president for the last 49 years was elected chairman of the board, a newly created position. **George R. Carr**, vice-president and general manager, was elected chairman of the

executive committee and **Robert Adams Carr**, vice-president, was elected president at the same time. **S. C. Johnson**, assistant vice-president of the Eastern division, was elected vice-president in charge of the railroad department of the Eastern division, **Roger Q. Milnes**, assistant vice-president of the Western division was elected vice-president in charge of the railroad department of the Western division and **A. H. Reynolds**, chief chemist, was promoted to directing chemist.

**Thomas F. Wilson** has been appointed assistant to the senior vice-president in charge of operations of the **American Car & Foundry Co.** Mr. Wilson began his career with the New York Central in March, 1906, and continued with that road until 1916. He joined the American Car & Foundry Co. in June, 1916, as secretary to W. C. Dickerman, now chairman of the board of the American Locomotive Company. Following service as an ensign in the Navy during 1918-19, he returned to a.c.f. and was subsequently appointed secretary to the senior vice-president in charge of operations.

**E. J. Finkbeiner**, who has served in the operating department of the American Car & Foundry Co. since May, 1922, has been appointed assistant vice-president to the senior vice-president in charge of operations. Mr. Finkbeiner has been associated with the company for almost forty years. He joined a.c.f. as a clerk in the auditing department of the Detroit, Mich., plant in July, 1904, and served in the production division at that plant during the first world war. He was transferred to the company's New York office in May, 1922, as general supervisor of costs and estimates.

**J. L. Wood**, mechanical engineer of the American Car & Foundry Co., has been appointed assistant vice-president to the vice-president in charge of engineering. Mr. Wood was graduated with an engineering degree from Alabama Polytechnic. During summer vacation periods, he worked in



**J. L. Wood**

the Whistler Shops of the Mobile & Ohio, and in the drafting room of the Gulf, Mobile & Northern. He joined a.c.f. in January, 1906, as local engineer in the company's Memphis, Tenn., plant. He was



# High Standards Maintained

for

## Compressor Replacement Parts

Our "know-how" of air compressor replacement parts has a background of three generations . . . knowing the best available material for the job . . . possessing the craftsmanship to do it well.

There is no let-down in standards . . . the same high quality built into the original is maintained in the replacement, a policy that extends compressor service life with top efficiency.

*It is a small part of the proud story of war time railroading — the amazing ability of equipment to "take it" far above and beyond the normal call.*



**WESTINGHOUSE AIR BRAKE CO.**

**WILMERDING, PENNSYLVANIA**

January 29, 1944

35

transferred to the New York office as assistant mechanical engineer in the engineering department in January, 1928, and appointed mechanical engineer in December, 1936.

The Army-Navy "E" flag was presented to the **J. G. Brill Company**, Philadelphia, Pa., for excellence in the production of war materials on January 25. The company is engaged in the production of howitzer gun carriages, trailers for anti-aircraft equipment, airplane sections, ship bulkheads, and miscellaneous products for the armed services.

**H. N. Arbuthnot**, assistant general manager of sales of the **Allegheny Ludlum Steel Corporation** with headquarters at Brackenridge, Pa., has been promoted to regional manager of the Detroit region of the corporation, a new position created as the result of the consolidation of manufacturing and distribution facilities in the Detroit district. Mr. Arbuthnot was graduated from Washington and Jefferson University in 1914 and shortly thereafter entered the employ of the American Sheet & Tin Plate Co. Later he went with the Weirton Steel Company and was advanced to assistant district manager of its Chicago office. Still later he became associated with the Follansbee Brothers Company, serving first as district manager and later as special representative at Detroit. In 1926, he was appointed Detroit district manager of Allegheny and later was promoted to assistant general manager of sales, which position he has held until his recent promotion.

**Thomas MacLachlan**, formerly manager of the New York office of the Vulcan Iron Works, has been appointed general manager in charge of a new, enlarged New York and export office opened by the **H. K. Porter Company** at 50 Church street. **R. G. Newell**, who managed the New York office of the Quimby Pump Company before its acquisition by Porter, will direct activities of Porter's Quimby Pump division in New England and the New York district from the new office, and **Earl M. Bardo**, formerly with the Robinson Manufacturing Company, will be headquartered in the same office, representing Porter chemical process equipment in the same territory.

## OBITUARY

**Lawrence H. Dunham**, assistant manager of the metallurgical department of the American Steel & Wire Co., died in Pittsburgh, Pa., on January 19. He was 52 years of age.

## TRADE PUBLICATIONS

**BUDA CHORE BOY.**—An eight-page bulletin, No. 1155, has been published by the Buda Company, Harvey, Ill., describing the Buda Chore Boy, a platform type shop truck manufactured by this company. The bulletin explains the construction features and uses of this truck, contains a list of specifications and is attractively made up with two-color printing and numerous illustrations.

# Equipment and Supplies

## Forecasts Purchase of 500,000 Cars in 5 Years After War

E. D. Campbell, vice-president in charge of engineering for the American Car & Foundry Co., speaking on the effects of the war on the development of railroad equipment and post-war materials before a meeting of the A. S. M. E. Anthracite-Lehigh Valley Section in Berwick, Pa., on January 28, estimated that "100,000 freight cars per year will probably be purchased for at least five years after the war. This is predicated on the record which shows that class I railroads in this country have approximately 1,800,000 freight cars. Of that number of cars, during the year 1942, cars retired were approximately 70,000 and cars built approximately 63,000. The record of the totally owned cars by class I railroads as of January 1, 1943, shows that 536,802 cars or 30.8 per cent are over 25 years old, and only 142,138 cars or 8.1 per cent are under 10 years old. It requires no stretch of the imagination to realize that with over 500,000 cars over 25 years old and still in use, the requirements for the first post-war five years could easily be 500,000 cars."

Mr. Campbell expressed the belief that "the year 1944 will not unfold any new materials for car construction but that 1945 may bring forth materials representing an advance in the physical characteristics for the car-building industry."

In the future, he forecasts, the conventional freight car will be several thousand pounds lighter than those in use today and trucks will be utilized capable of speeds at least up to 80 miles per hour without serious damage to the lading. The use of steel alloys for the majority of strength members in freight cars will become common practice and a limited number of cars, particularly those subject to severe deterioration by corrosion and oxidation, will be built of aluminum alloy.

## O.D.T. Reports on Production of Equipment in 1943

Last year's production of railroad equipment for domestic use totaled 830 locomotives, 28,790 freight cars, and 661 troop sleepers and kitchen cars, according to a January 25 statement from the Office of Defense Transportation. The statement called this and equipment produced for other domestic transportation agencies "less than desired" by O. D. T., adding, however, that "the outlook for 1944 is better."

In announcing the production totals, O. D. T. pointed out that a part of the production in some programs was actually authorized during 1942 and represented a carry-over from that year. In addition to the railroad equipment, the 1943 production included 2,699 motor trucks, 5,623 trailers, 1,726 integral buses, 75 tugboats, eight towboats, 54 steel barges, 269 wooden barges.

Elaborating on its statement that the 1943 production was less than O. D. T. desired,

the announcement said that "the slippage in production of domestic transportation equipment was due to the fact that most of these items are also used in great quantities by the armed services. Scarcity of controlled materials during the first half of 1943 and tightness of component parts during the second half also contributed to the slippage. Due to the requirements of the military forces, the O. D. T. received inferior preference ratings on component parts for domestic transportation equipment, but this situation was corrected by the end of 1943."

## LOCOMOTIVES

The **CHESAPEAKE & OHIO** is inquiring for 15 mallet type freight locomotives with a 2-6-6-6 wheel arrangement.

## FREIGHT CARS

The **CHESAPEAKE & OHIO** is inquiring for 5,000 hopper coal cars of 50 tons capacity.

The **CENTRAL OF GEORGIA** is inquiring for 100 50-ton hopper cars and 10 70-ton hopper cars.

# Construction

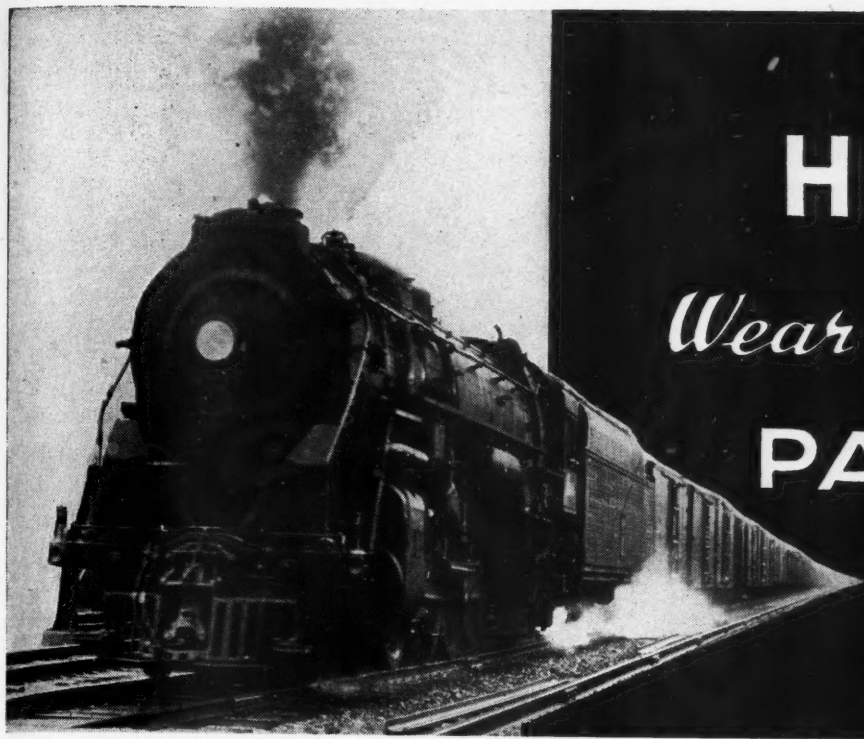
**WESTERN PACIFIC.**—This road has awarded a contract, amounting to \$80,000, to N. H. Sjöberg & Son, Oakland, Cal., for the construction of two frame warehouses, with the necessary track work and driveways in Oakland. As a means of promoting conservation of materials, the Western Pacific is utilizing trusses, heavy timbers and other materials salvaged from buildings which have been dismantled at various points on the road.

**C. N. R. COMMISSARY.**—One month's provisions for dining and troop train commissary cars on the Canadian National, operating through the Montreal district, involve placement of an order such as the following: Bread, 16,120 loaves of 1½ lb. each; 42,472 lb. meat; 6,522 lb. fish; 7,500 lb. poultry; 6,180 doz. eggs; 25,800 lb. potatoes; 20,325 lb. fresh vegetables; 15,660 qt. milk and cream; 3,000 lb. butter; 1,000 lb. cheese; 175 boxes apples; 50 boxes grapefruit; 18 boxes lemons; 150 boxes oranges; 12 doz. cucumbers; 1,200 bunches celery hearts; 2,900 heads lettuce; 550 bunches parsley; and 500 green peppers.

**SMOKES FOR SERVICEMEN.**—Fund boxes, placed in the Canadian National's Montreal office by the Canadian Legion War Services, in the past year accumulated contributions totaling \$1,420.31. The pennies, nickels and dimes of clerical workers were sufficient to purchase 660,000 cigarettes for shipment to Canadian forces overseas.

**"STATIC."**—This monthly mimeographed sheet, which is sent free to 80 members of the N. & W. Roanoke Statistical department, who are now in the service, embodies the personal qualities of a small-town newspaper. It reports happenings in the railway "family," excerpts of letters written by the boys, bits about men on furlough, and personal and sports items.





# HSGI

## *Wear Resisting*

# PARTS

## Insure Higher Availability

LOCOMOTIVES equipped with HUNT-SPILLER *Air Furnace* GUN IRON wear-resisting parts are particularly outstanding for their high monthly revenue mileage. This performance is highly significant especially in view of the war-time operating conditions. Every locomotive must produce to the utmost.

The resistance of HUNT-SPILLER *Air Furnace* GUN IRON to frictional wear and high superheat temperatures is a contributing factor to the high efficiency and availability of modern power.

### HSGI

Reg. U. S. Trade Mark

Cylinder Bushings  
Cylinder Packing Rings  
Pistons or Piston Bull Rings  
Valve Bushings  
Valve Packing Rings  
Valve Bull Rings  
Crosshead Shoes  
Hub Liners  
Shoes and Wedges  
Floating Rod Bushings

#### Finished Parts

Dunbar Sectional Type Packing  
Duplex Sectional Type Packing  
for Cylinders and Valves  
(Duplex Springs for Above  
Sectional Packing)  
Cylinder Snap Rings  
Valve Rings, All Shapes  
Light Weight Valves  
Cylinder Liners and Pistons  
for Diesel Service

### HUNT SPILLER MFG. CORPORATION

V. W. Ellet, President

E. J. Fuller, Vice-Pres. & Gen. Mgr.

#### Office & Works

383 Dorchester Ave.

South Boston 27, Mass.

Canadian Representative: Joseph Robb & Co., Ltd., 5575 Cote St. Paul Rd., Montreal, P. Q.

Export Agent for Latin America:

International Rwy. Supply Co., 30 Church Street, New York, N. Y.

# HUNT-SPILLER

# GUN IRON

*Air Furnace*

# Financial

**AKRON, CANTON & YOUNGSTOWN.—Reorganization Expenses.**—Division 4 of the Interstate Commerce Commission has approved maximum amounts of allowances for compensation and expenses in this road's reorganization proceedings. The total amount claimed was \$130,082, of which the division approved \$100,328. The claims of the Railroad Credit Corp. for \$10,767 and of the reorganization managers for \$27,446 were allowed in full, but substantial reductions were applied to the requests of various counsel for committees. The joint claim of Mudge, Stern, Williams & Tucker and of Jones, Day, Cockley & Reavis in the amount of \$25,045 was allowed \$11,545, while that of Pitney, Hardin & Ward was reduced from \$22,922 sought to \$17,089 approved, and that of Sullivan & Cromwell from \$16,597 sought to \$11,597 approved.

**BALTIMORE & OHIO.—Debt Reduction.**—On January 21, R. B. White, president of the Baltimore & Ohio, announced that during the year 1943, the principal amount of system bonds and notes outstanding in the hands of the public, excluding equipments, was reduced by \$72,339,450, of which \$56,654,050 was cancelled through the operation of the sinking fund created pursuant to the 1938 plan.

**CHESAPEAKE WESTERN.—Acquisition.**—Division 4 of the Interstate Commerce Commission has authorized the Chesapeake Western Railway to purchase the property of the Chesapeake & Western Railroad, controlled by it through ownership of stock and bonds, in order to effect the eventual dissolution of the subsidiary and so simplify capital structure.

**CHICAGO BURLINGTON & QUINCY.—Financing Diesel Locomotives.**—The Burlington has completed arrangements with banks in Chicago, the Twin Cities and Omaha for the financing of 16 Diesel-electric locomotives being built by the Electro-Motive Division of General Motors Corporation. The banks will loan \$7,900,800 to the railroad in 1944 and it will pay the banks \$49,380 toward the price of each locomotive on the first of the month following delivery and the balance over a period of 10 years, beginning January 1, 1945, in 40 equal quarterly installments.

**MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—Reorganization Expenses.**—Division 4 of the Interstate Commerce Commission has approved a maximum limit of \$250,000 for expenses incurred and to be incurred by this road's reorganization managers, except for legal fees and expenses, in making the plan of reorganization effective.

**DENVER & RIO GRANDE WESTERN.—Interest Payments.**—The Denver & Rio Grande Western will make payment of certain past due interest on several bond issues, including the Denver & Rio Grande first consolidated mortgage, the Rio Grande Western Railway Company first trust mortgage, the

Rio Grande Western Railway Company first consolidated mortgage, the Denver & Rio Grande Western Railroad Company refunding and improvement mortgage, series "B", and the Denver & Rio Grande Western Railroad Company general mortgage. Holders of such issues have been requested to inform trustees whether they hold coupons now payable.

**MISSOURI-KANSAS-TEXAS.—New Director.**—Frank Phillips, chairman of the board of the Phillips Petroleum Company, has been elected a director of the Missouri-Kansas-Texas.

**MISSOURI PACIFIC.—St. L. B. & M. Trackage Rights.**—An application for approval of a trackage rights agreement, substantially continuing an arrangement that has been in effect for many years, has been filed with the Interstate Commerce Commission by the St. Louis, Brownsville & Mexico. It applies to operations over the Gulf Colorado & Santa Fe from Angola, Tex., to Houston, 24.32 miles.

**SEABOARD AIR LINE.—Reorganization.**—The plan for this road's reorganization which has been approved by the federal courts has been filed with the Interstate Commerce Commission by the reorganization committee in connection with an application for authority to solicit the deposit of certain securities as a step toward completion of equity receivership proceedings.

The plan indicates that the road's situation and prospects do not permit any provision for holders of present adjustment bonds, preferred stock, common stock, or unsecured claims not entitled to priority. It proposes a total capitalization for the new company of \$196,870,000, including 850,000 shares of new common stock without par value taken for the purpose at \$100 a share. Fixed interest charges would amount to \$1,746,000 yearly, and total fixed and contingent charges before preferred dividends to \$6,321,000 yearly. Dividends on \$15,000,000 of 5 per cent preferred stock would require \$750,000 per annum.

The yearly fixed charges would include \$110,000 of undisturbed rentals and charges; \$336,000 on \$11,870,000 of recent equipment obligations; and \$1,300,000 on \$32,500,000 of series A 40-year 4 per cent first mortgage bonds. Annual contingent charges would include a \$1,625,000 capital fund; \$325,000 for the first mortgage sinking fund; \$2,362,500 interest on \$52,500,000 of series A 50-year 4½ per cent income mortgage bonds; and \$262,500 for the income mortgage sinking fund.

**SPRINGFIELD & SOUTHWESTERN.—Stock.**—Division 4 of the Interstate Commerce Commission has authorized this company to issue \$88,500 of common stock of \$100 par value to be delivered at par in payment of outstanding indebtedness or in satisfaction of advances made for such purposes.

## Average Prices Stocks and Bonds

	Jan. 25	Last week	Last year
Average price of 20 representative railway stocks...	37.51	37.16	29.51
Average price of 20 representative railway bonds...	83.65	83.06	66.41

## Dividends Declared

Augusta & Savannah.—\$2.50, payable January 17 to holders of record January 10.  
Chestnut Hill.—75¢, quarterly, payable March 4 to holders of record February 19.  
Erie.—\$5.00, preferred, \$1.25, quarterly; payable March 1, June 1, September 1 and December 1 to holders of record February 15, May 17, August 17 and November 16, respectively.  
Louisville & Nashville.—Irregular, \$2.00, payable March 3 to holders of record February 1.  
Louisville, Henderson & St. Louis.—Common, \$4.00; 5% non-cum. preferred, \$2.50; both semi-annually, payable February 15 to holders of record February 1.  
Norfolk & Western.—\$2.50, quarterly, payable March 10 to holders of record February 21.  
North Carolina.—7% guaranteed, \$2.50, semi-annually, payable February 1 to holders of record January 21.  
Peoria & Bureau Valley.—\$2.50, payable February 10 to holders of record January 20.  
Rutland & Whitehall.—\$1.05, payable February 15 to holders of record February 1.  
Wheeling & Lake Erie.—4% prior lien preferred, \$1.00, quarterly, payable February 1 to holders of record January 25.

## Abandonments

**MISSOURI-KANSAS-TEXAS.**—Division 4 of the Interstate Commerce Commission has authorized the Texas Central and the Missouri-Kansas-Texas of Texas, lessee, to abandon and to abandon operation of, respectively, a line from DeLeon, Texas, to Cross Plains, 41.87 miles. Jurisdiction was reserved for 2 years for the benefit of any employees adversely affected.

**MISSOURI-KANSAS-TEXAS.**—In a proposed report Examiner Paul C. Albus has recommended that the Interstate Commerce Commission authorize this road to abandon a branch from Walker, Mo., to Excelsior Springs, 14.04 miles, in spite of objections by residents in the vicinity and by the War Food Administration and Department of Agriculture, on the ground that it has been operated at a loss for several years, while "the prospects of regaining the traffic lost to other modes of transportation are quite remote."

**NEZPERCE & IDAHO.**—Examiner R. Romero has recommended that the Interstate Commerce Commission deny this road's application for authority to abandon its line from Nezperce, Ida., to Craigmont, 13.8 miles, pointing out that, if a line earns more than all operating expenses and taxes, the fact that the net revenues are insufficient to meet all expenses and interest charges does not warrant abandonment if the public need requires continued operation. The examiner recommended further, however, that denial of the application be made without prejudice to its renewal if it should develop that operating expenses and taxes for the full year 1943 are in excess of revenues.

**SEABOARD AIR LINE.**—This road has applied to the Interstate Commerce Commission for authority to abandon a branch from Fletchers, Fla., to Terra Ceia, 1.3 miles.

**READING.**—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon a 3.87-mile segment of its Helfenstein branch, over which no trains have been operated for the past 5 years.





Official U. S. Navy Photographs

## THE "Water Buffalo" AND N-A-X HIGH TENSILE

N-A-X HIGH TENSILE is extensively used in the construction of the new LVT (2)—Landing Vehicle Tracked—to *reduce weight and still provide the strength and stamina* that equipment of this kind must have to meet the critical test of modern amphibious warfare.

Known as the "Water Buffalo," the LVT (2), designed, engineered and manufactured by Food Machinery Corporation, is a rugged amphibious vehicle which is highly maneuverable—on land, in swamps, and in the water.

At Tarawa, and more recently in the New Britain

landings, amphibious vehicles such as these proved invaluable in surmounting obstacles in the water and gaining objectives ashore.

Great numbers of LVT's will be needed to carry out operations in all theaters of war—and large tonnages of N-A-X HIGH TENSILE will be needed to help build this equipment, but when the Victory is won, this outstanding steel will be used to build modern light-weight transportation equipment, as well as countless other products in which weight-reduction and strength will be important.

*Buy Bonds and Help Speed Victory:*

### GREAT LAKES STEEL CORPORATION

DETROIT, MICHIGAN

*Sales Offices in Principal Cities*

*Division of NATIONAL STEEL CORPORATION Executive Offices, Pittsburgh, Pa.*



January 29, 1944

# Railway Officers

## OPERATING

**S. J. Hale**, assistant superintendent of the Radford, Va., division of the Norfolk & Western, has been appointed superintendent of that division succeeding **W. O. Franklin**, who has been advanced to assistant to the general manager with headquarters at Roanoke, Va.

**E. D. Moody**, assistant superintendent of the Western division of the Southern Pacific, with headquarters at Oakland Pier, Cal., has been promoted to assistant to the general manager, with headquarters at San Francisco, Cal. **F. E. Kalbaugh**, assistant superintendent of transportation, with headquarters at San Francisco, has been advanced to assistant superintendent of the Western division, succeeding Mr. Moody.

**A. M. Shea**, whose promotion to the position of superintendent, St. Lawrence division, of the Canadian National with headquarters at Montreal, Que., was an-



A. M. Shea

nounced in the *Railway Age* of December 18, was born, educated and entered railroad service in that city. He first served as brakeman in the transportation department of the Grand Trunk (Canadian National) beginning in June, 1911. Five years later, Mr. Shea became conductor, and in January, 1942, he was appointed trainmaster. In June of the same year he was named assistant superintendent, St. Lawrence division, acting in that capacity until his recent advancement to the position of division superintendent with headquarters at Montreal.

**C. W. Ivey**, trainmaster in charge of all sub-divisions of the Arkansas division of the Missouri Pacific, with headquarters at Little Rock, Ark., has been promoted to assistant general superintendent of transportation of the Gulf Coast Lines and the International-Great Northern (Missouri Pacific), with headquarters at Houston, Tex., succeeding **E. W. Hargrave**,

who has been granted leave of absence to enter the armed forces. **F. E. Fletcher**, chief dispatcher at Little Rock, has been advanced to trainmaster in charge of all sub-divisions, with the same headquarters, replacing Mr. Ivey.

**W. W. Argabrite**, superintendent of organization on the staff of the vice-president of the Railway Express Agency at San Francisco, Cal., has been appointed superintendent of the Nebraska-Wyoming and Iowa division with headquarters at Omaha, Neb. He succeeds **Cowan M. Hall**, who has been named superintendent of the Central California division at San Francisco, Cal., to replace the late **E. M. Graham**.

## TRAFFIC

**G. W. M. Gemmill** has been appointed division freight agent of the Baltimore & Ohio at Cumberland, Md., and **M. N. Freese** has been named to that position at Parkersburg, W. Va.

**B. E. Heinz**, chief clerk of the general traffic department of the Alton with headquarters at Chicago, has been promoted to assistant general freight agent, with the same headquarters, a newly-created position.

**T. D. Slattery** of the commercial manager's office, London, Midland, & Scottish Railways, has been appointed general traffic manager of the Associated British & Irish Railways Inc., at New York. He succeeds **Lieutenant-Colonel Clive M. Turner**, whose death was reported in the *Railway Age* of September 18, 1943. Mr. Slattery, prior to his return to England, was for some years attached to the London, Midland & Scottish Railway's New York organization, and later to the Associated British & Irish Railways Inc., at New York.

## ENGINEERING & SIGNALING

**J. A. Stocker**, district engineer of the New York Central, Lines West of Buffalo, with headquarters at Cleveland, Ohio, has been appointed consulting engineer, with the same headquarters.

**Arthur Price**, assistant division engineer of the Delaware and Susquehanna divisions of the Erie, with headquarters at Hornell, N. Y., has been promoted to division engineer of the Wyoming and Jefferson divisions, with headquarters at Dunmore, Pa., to succeed **Louis Rossman**, who has been transferred to the Marion division, with headquarters at Huntington, Ind. Mr. Rossman replaces **L. H. Jentoft**, who has been transferred to Salamanca, N. Y., with jurisdiction over the Alleghany, Bradford, Meadville and B. & S. W. divisions, succeeding **O. N. Lackey**, who has been appointed assistant division engineer at Huntington to replace **F. A. Roberts**, who has been assigned to other duties at his own request. All these changes became effective on January 16.

## OBITUARY

**Carl August deGersdorff**, member of the law firm of Cravath, deGersdorff, Swaine & Wood which has served in many

cases in which railroads were involved, died on January 21 at his New York home. He was 78 years old. Mr. deGersdorff was born at Salem, Mass., on July 10, 1865. He received his A. B. degree from Harvard University in 1887, and was a student of Harvard Law School from 1887 to 1889.

**James S. McKibbin**, who retired in 1940 as local treasurer of the Pittsburgh & Lake Erie, died on January 22 at his home in Dormont, Pittsburgh, Pa. He was 64 years old.

**Morris Rutherford**, former president of the Lehigh & Hudson River, whose death on January 8 was reported in the *Railway Age* of January 15, was born near Newark, N. J., on December 31, 1864. He entered railroading in 1883 as an office boy of the Lehigh & Hudson River, serving in this capacity as clerk, traffic and accounting departments, until 1896, when he became assistant general freight agent and paymaster. In 1895 he was appointed general freight agent, and in 1902 was named general passenger agent. Mr. Rutherford advanced to vice-president and general manager in 1905, also becoming director in 1906. From 1925 until 1938 he served as president and general manager of that same road, acting as president from 1938 until January 1, 1940, when he retired.

**P. M. Gatch**, general claims attorney of the Illinois Central, with headquarters at Chicago, died in a hospital in that city on January 20, after an illness of several weeks. Mr. Gatch was born at Cincinnati, Ohio, on September 23, 1876, and graduated from Cumberland University in June, 1898. He entered railway service in June, 1901, as claim agent of the Illinois Central, with headquarters at Decatur, Ill., being transferred to Evansville, Ind., in 1907. In May, 1913, Mr. Gatch was promoted to assistant general claim agent, with headquarters at Chicago, and on February 1, 1925, he was advanced to general claim agent, with the same headquarters. In April, 1925, he was promoted to chief general claim agent at Chicago, and in May of the same year he was advanced to the position he held at the time of his death.

**MOVIE-CAR**.—Several years ago the Sudan Railway in the Anglo-Egyptian Sudan equipped a railway car with a magic lantern, a silent movie projector and a small portable generator. This car toured the system, giving performances at wayside stations, especially for employees of the railway.

Since the outbreak of the war, the "movie-car," now equipped with a sound projector, has been even more widely used. Latest war films, with Arabic commentaries, government-information shorts, and educational are shown. Regular itineraries are announced, and from 400 to 600 persons frequently gather at stations to see the shows.

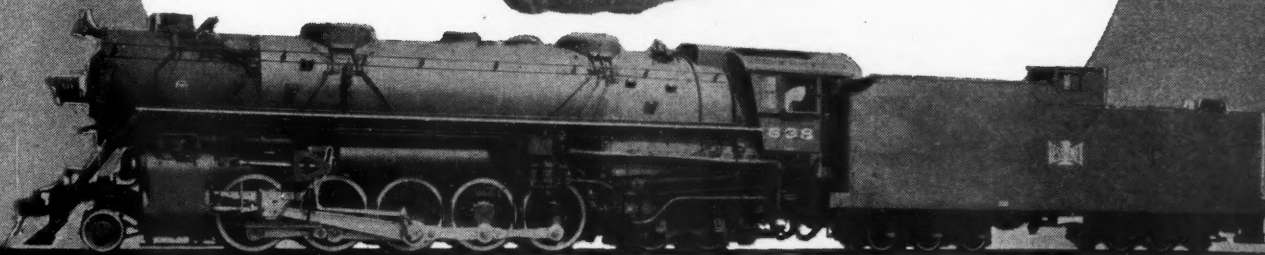
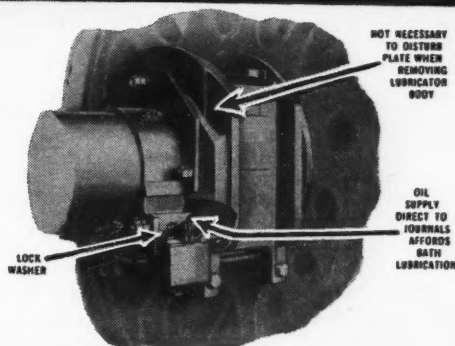
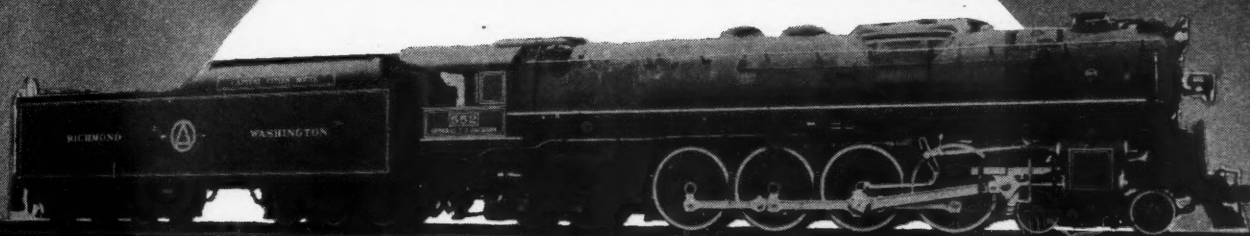
In order that people living considerable distances from the railway may benefit from the movies, the railway company sometimes transports the projection equipment by truck to isolated villages and presents special performances.—Foreign Commerce Weekly.



# Thousands of **HENNESSY**

DRIVING AND OTHER TYPES OF JOURNAL LUBRICATORS ARE  
**HELPING WIN THE WAR**

by Conserving Material, Labor and Lubricant,  
Extending Operating Periods between Shopping,  
thus Increasing Overall Availability.



All of which adds up to more economical operation, quicker  
turn arounds and greater mileage per month and between  
shopping periods, an essential in fulfilling the war effort.

**HENNESSY LUBRICATOR CO., INC.**  
75 WEST STREET  
NEW YORK 6, N. Y.

# Operating Revenues and Operating Expenses of Class I Steam Railways

FOR THE MONTH OF NOVEMBER, 1943 AND 1942

Item	United States		Eastern District		Southern District		Western District	
	1943	1942	1943	1942	1943	1942	1943	1942
Miles of road operated at close of month	229,099	230,031	56,180	56,639	43,386	43,580	129,533	129,812
Revenues:								
Freight	\$566,421,685	\$534,762,351	\$212,421,763	\$207,114,948	\$103,839,881	\$104,579,443	\$250,160,041	\$223,067,960
Passenger	141,924,495	108,060,404	55,672,746	44,034,573	27,600,450	22,099,334	58,651,299	41,926,497
Mail	10,917,902	9,773,585	3,659,405	3,464,078	2,003,680	1,764,030	5,254,817	4,545,477
Express	11,964,609	10,347,087	4,320,553	3,906,694	1,577,446	1,460,137	6,066,610	4,980,256
All other operating revenues	30,829,128	27,164,701	12,731,625	11,534,435	4,121,427	3,589,927	13,976,076	12,040,339
Railway operating revenues	762,057,819	690,108,128	288,806,092	270,054,728	139,142,884	133,492,871	334,108,843	286,560,529
Expenses:								
Maintenance of way and structures	97,380,263	71,213,130	37,904,143	28,623,418	15,118,393	12,335,480	44,357,727	30,254,232
Maintenance of equipment	127,587,558	104,892,968	54,173,877	45,400,425	22,874,525	20,594,731	50,539,156	38,897,812
Traffic	10,878,648	10,067,141	3,904,439	3,752,403	2,006,690	1,925,895	4,967,519	4,388,843
Transportation—Rail line	240,759,509	199,079,787	105,485,571	87,242,381	38,718,743	33,639,636	96,555,195	78,197,770
Transportation—Water line	4,973	28,074					4,973	28,074
Miscellaneous operations	9,283,577	7,678,274	3,279,164	2,778,358	1,376,153	1,199,553	4,628,260	3,700,363
General	16,328,710	13,485,967	6,710,838	5,509,194	3,021,995	2,558,737	6,595,877	5,418,036
Railway operating expenses	**502,213,292	406,389,193	211,458,032	173,306,179	83,116,499	72,254,032	207,638,761	160,828,982
Net revenue from railway operations	259,844,527	283,718,935	77,348,060	96,748,549	56,026,385	61,238,839	126,470,082	125,731,547
Railway tax accruals	148,569,814	118,660,947	42,551,010	39,449,623	33,725,302	30,422,666	72,293,502	48,788,658
Railway operating income	111,274,713	165,057,988	34,797,050	57,298,926	22,301,083	30,816,173	54,176,580	76,942,889
Equipment rents—Dr. balance	11,638,506	12,378,345	5,042,577	4,923,457	203,215	816,220	6,392,714	6,638,668
Joint facility rent—Dr. balance	3,255,473	3,670,658	1,534,883	1,706,489	444,809	408,640	1,275,781	1,555,529
Net railway operating income	96,380,734	149,008,985	28,219,590	50,668,980	21,653,059	29,591,313	46,508,085	68,748,692
Ratio of expenses to revenues (per cent)	65.9	58.9	73.2	64.2	59.7	54.1	62.1	56.1
Depreciation—Way and structures	8,771,486	4,008,408	3,740,918	2,134,471	1,490,137	464,422	3,540,431	1,409,515
Deferred maintenance—Way and structures	544,799	377,761	336,434	33,361	d 12,750		221,115	344,400
Amortization of Defense projects—Road	1,194,209	508,109	386,786	153,496	227,793	89,215	579,630	265,398
Depreciation—Equipment	17,673,280	16,949,310	7,268,416	7,157,667	3,520,608	3,415,998	6,884,256	6,375,645
Amortization of Defense projects—Equipment	13,146,293	10,512,732	4,907,057	3,715,367	3,370,751	3,352,845	4,868,485	3,444,520
Deferred maintenance—Equipment	93,853	212,410	5,333		d 9,289		97,809	212,410
Major repairs—Equipment	175,000						175,000	
Pay roll taxes	19,160,345	14,822,255	8,434,163	6,379,426	2,967,037	2,577,930	7,759,145	5,864,899
Federal income taxes*	105,013,461	78,811,969	23,500,597	22,839,617	25,693,876	21,990,937	55,818,988	33,981,415
All other taxes	24,396,008	25,026,723	10,616,250	10,230,580	5,064,389	5,853,799	8,715,369	8,942,344

FOR ELEVEN MONTHS ENDED WITH NOVEMBER, 1943 AND 1942

Item	1943	1942	1943	1942	1943	1942	1943	1942
Miles of road operated at close of month	229,274	230,952	56,292	56,735	43,434	43,770	129,548	130,447
Revenues:								
Freight	6,211,076,132	\$5,412,824,390	\$2,424,609,326	\$2,189,111,437	\$1,180,140,591	\$1,051,480,177	\$2,606,326,215	\$2,172,232,776
Passenger	1,501,319,756	909,034,896	606,325,709	418,622,565	304,984,962	176,510,220	590,009,085	313,902,111
Mail	110,698,016	98,276,855	38,281,469	35,691,744	20,126,617	17,597,153	52,289,930	44,987,958
Express	116,767,701	85,728,625	41,046,730	31,650,416	16,436,680	13,625,107	59,284,291	40,453,102
All other operating revenues	333,103,768	257,367,017	144,951,318	117,908,809	43,982,714	33,283,962	144,169,736	106,174,246
Railway operating revenues	8,272,965,373	6,763,231,783	3,255,214,552	2,792,984,971	1,565,671,564	1,292,496,619	3,452,079,257	2,677,750,193
Expenses:								
Maintenance of way and structures	974,284,812	723,503,476	375,904,148	293,277,307	165,674,108	125,503,922	432,706,556	304,722,247
Maintenance of equipment	1,286,280,278	1,100,242,328	548,201,546	488,946,521	239,161,725	211,393,841	498,917,007	399,901,966
Traffic	115,883,402	107,193,608	42,122,642	39,022,900	22,086,294	20,979,031	51,674,466	47,191,677
Transportation—Rail line	2,421,029,375	2,027,545,725	1,085,784,572	917,845,613	406,687,121	344,330,807	928,557,682	765,369,305
Transportation—Water line	8,284	2,023					8,284	2,023
Miscellaneous operations	95,894,759	67,551,009	34,343,770	26,529,754	15,254,260	10,775,671	46,296,729	30,245,584
General	164,922,174	143,522,820	66,714,937	57,765,147	32,287,840	27,657,598	65,919,397	58,100,875
Railway operating expenses	†5,058,303,084	4,169,556,943	2,153,071,615	1,823,387,242	881,151,348	740,640,870	2,024,080,121	1,605,528,831
Net revenue from railway operations	3,214,662,289	2,593,674,840	1,102,142,937	969,597,729	684,520,216	551,855,749	1,427,999,136	1,072,221,362
Railway tax accruals	1,755,174,430	1,118,864,477	572,561,347	419,185,512	418,354,590	286,868,586	764,258,493	412,810,379
Railway operating income	1,459,487,859	1,474,810,363	529,581,590	550,412,217	266,165,626	264,987,163	663,740,643	659,410,983
Equipment rents—Dr. balance	137,475,140	128,965,678	56,850,734	60,477,787	7,856,815	7,282,895	72,767,591	61,204,996
Joint facility rent—Dr. balance	37,221,980	35,754,911	18,644,987	18,552,600	4,543,902	3,949,063	14,033,091	13,253,248
Net railway operating income	1,284,790,739	1,310,089,774	454,085,869	471,381,830	253,764,909	253,755,205	576,939,961	584,952,739
Ratio of expenses to revenues (per cent)	61.1	61.7	66.1	65.3	56.3	57.3	58.6	60.0
Depreciation—Way and structures	96,691,834	37,446,726	41,507,203	22,911,404	16,235,049	5,369,303	38,949,582	9,166,019
Deferred maintenance—Way and structures	1,691,265	1,514,623	390,813	166,805	d 78,525		1,378,977	1,347,818
Amortization of Defense projects—Road	9,435,807	3,657,570	3,241,697	1,047,812	1,734,969	512,235	4,459,141	2,097,523
Depreciation—Equipment	193,184,517	189,878,425	81,918,709	81,403,794	39,411,828	38,152,560	71,853,980	70,322,071
Amortization of Defense projects—Equipment	119,250,034	73,074,192	41,807,299	24,313,154	28,023,825	20,285,460	49,418,910	28,475,578
Deferred maintenance—Equipment	25,323	854,903	26,668		d 62,531		61,185	854,903
Major repairs—Equipment	1,625,000						1,625,000	
Pay roll taxes	188,850,777	155,566,117	81,317,711	67,860,233	32,081,111	27,377,359	75,451,955	60,328,525
Federal income taxes*	1,285,083,530	712,784,279	367,546,698	242,828,863	330,759,079	208,317,732	586,777,753	261,637,684
All other taxes	281,240,123	250,514,081	123,696,938	108,496,416	55,514,400	51,173,495	102,028,785	90,844,170

\* Includes income tax, surtax, and excess-profits tax.

d Decrease, deficit or other reverse items.

\*\* Includes \$29,157,941 reported as accrual on account of major wage awards. This amount is incomplete as some roads did not include in the special report of accruals the 4¢ an hour which they paid to operating employees and charged to expenses as wages paid.

† Includes \$132,878,011 reported as accrual on account of major wage awards. This amount is incomplete as some roads did not include in the special report of accruals the 4¢ an hour which they paid to operating employees and charged to expenses as wages paid.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.